Public Utilities

Volume 61 No. 5 February 27, 1958

ELECTRIC CO-OPERATIVES RE-EXAMINED
By the Honorable David A. Hamil

« »

Taconite—A New Symbol of Free Enterprise
By John P. Callahan

« »

Plenty of Power—and Sputniks, Too
By Ernest R. Abrams

« »

Can Property Records Pay Their Way?

Houston Lighting & Power Company's 50-ton 855B-LC crane with extra long crawlers shown at work with 2½ cu. yd. dragline bucket—their 4th P&H machine.

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Public Utilities FORTNIGHTLY

VOLUME 61 FEBRUARY 27, 1958 NUMBER 5

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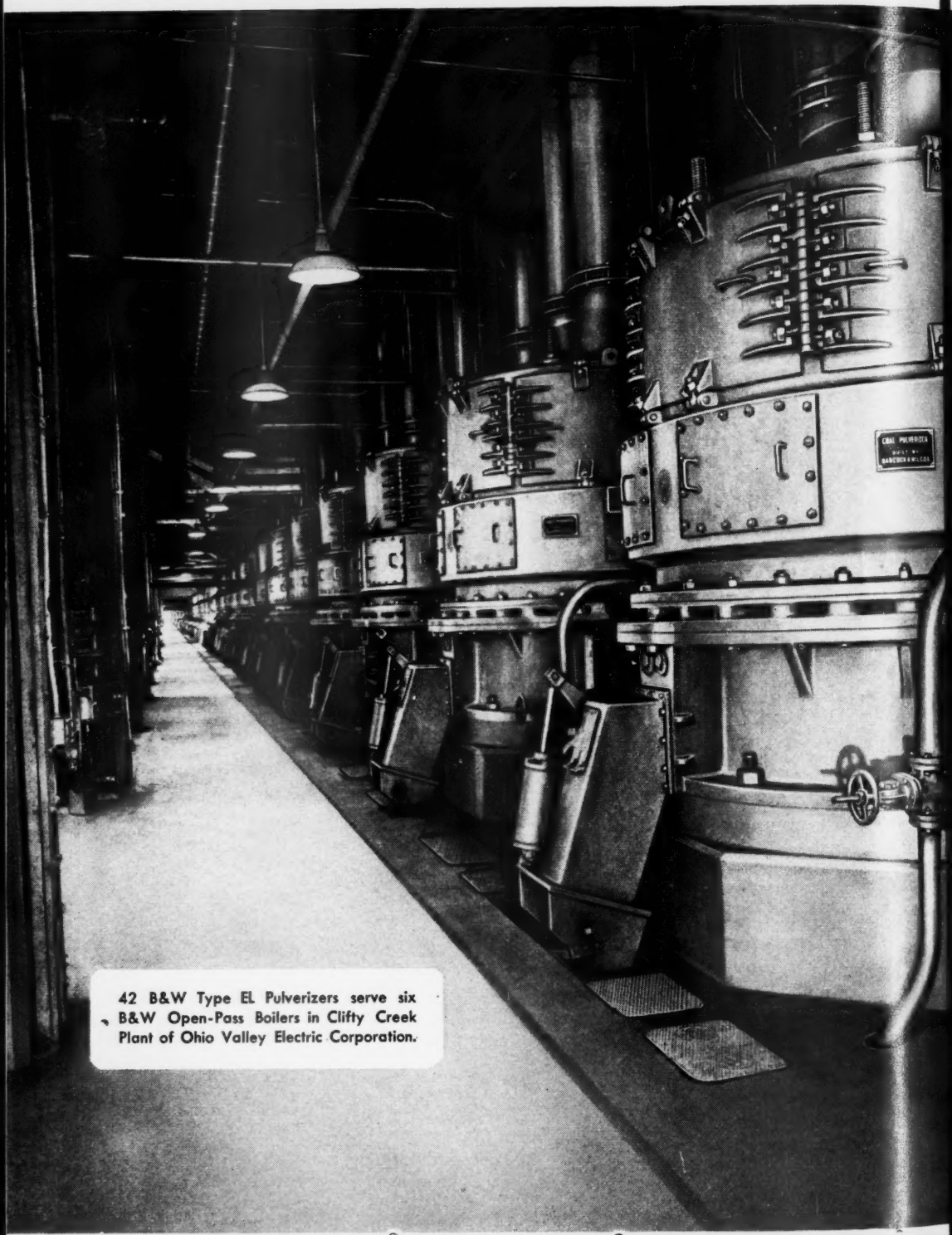

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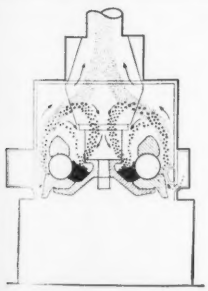
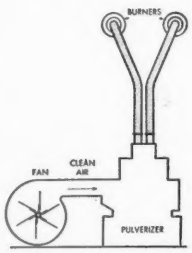
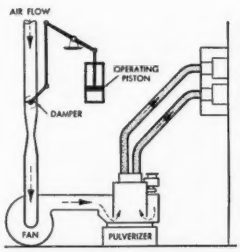


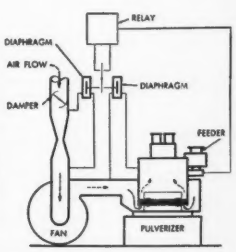
COAL RECIRCULATION — this means high fineness, aids drying.



PRESSURE SYSTEM — this eliminates fan wear, simplifies piping.



AIR CONTROL—this means one, simple control contact point.



MILL LEVEL CONTROL — this automatically adjusts fuel-feed.

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BOILER DIVISION

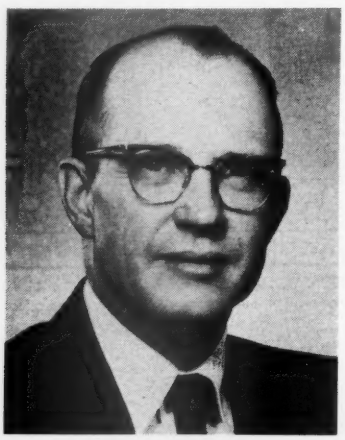
G-766

Pages with the Editors

RECENTLY there appeared in PUBLIC UTILITIES FORTNIGHTLY a thoughtful article by a member of the Texas bar which raised the question as to whether the co-operative form of business enterprise was a proper and desirable vehicle for electric utility service. This leading article gives another side of the picture. It outlines reasons for the view that the electric co-operative is a proper and desirable form for utility-type operations in the rural areas.

THIS article takes up the charges of discrimination and preference in favor of the co-operative in such matters as alleged tax exemption and regulation exemption, special tax treatment, and a comparison of co-operative rates with those of electric utility business enterprise. It concludes that the co-operative furnishes rural area electric customers with a unique form of service organization—one in which they can join together for common benefits and better mutual understanding.

THE author of this leading article is DAVID A. HAMIL, who became Administrator of the Rural Electrification Administration on June 26, 1956. His background is that of a rancher engaged in the cattle feeding business in Logan county, Colorado. At the time of his appointment MR. HAMIL was speaker of the Colorado house of representatives, a position he had held since 1951. He was first elected to the Colorado general assembly in 1938 and, with the exception of a two-year term in 1948-49, has served in it continuously.



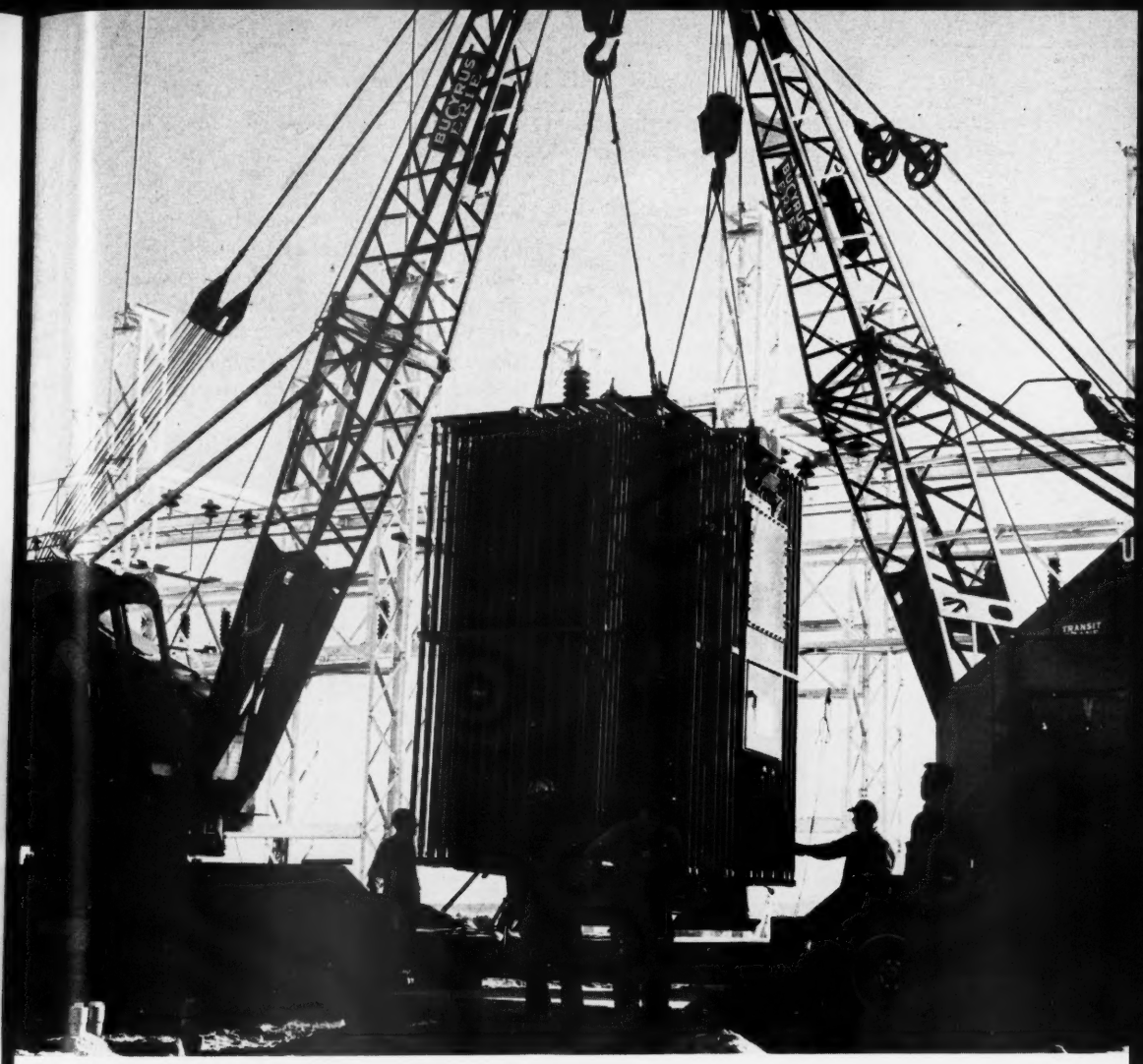
DAVID A. HAMIL

JOHN P. CALLAHAN

MR. HAMIL became active in the rural electrification program in 1939 when he helped sign up members and organize a section of the Highline Electric Association of Holyoke, Colorado. He served as director of the Highline Association for five years. When the co-operative started operation, it served about 180 consumer-members. Today it serves 4,000. The REA Administrator is a graduate of the Sterling, Colorado, high school and of Hastings College at Hastings, Nebraska. He was graduated from that college in 1930 with a Bachelor of Arts degree. At Hastings, he competed in track as a distance runner and at one time was Midwestern AAU champion in the 3½-mile cross-country run.

* * * *

WHEN an older industry fades from its familiar place in the landscape, finding a new one to replace it is like finding gold in the back yard. The northernmost



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*Are unreviewed application practices costing you the savings offered by standardization of medium transformers (501 to 7500 kva, 69 kv and below)?

416-20

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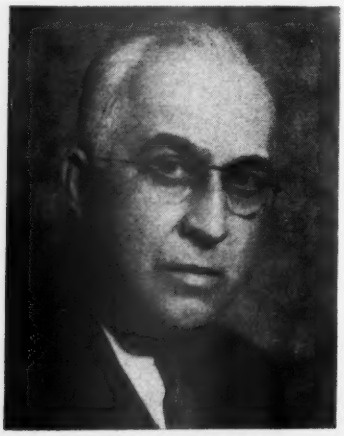
Central states were put in some such position when the richer iron and copper deposits became pretty well worked out. Necessity bore fruit again and a method of reducing the lower-grade, flinty ores was invented. Utilities, sharing in the boom, reflected this renaissance. The article beginning on page 298, by JOHN P. CALLAHAN, foreign correspondent of *The New York Times* and free-lance writer on business topics, discusses the way in which the challenge of the failing iron-ore deposits in Minnesota is being met through the stimulation of an entirely different industrial process.

* * * *

IN his recent Budget message, President Eisenhower noted that defense spending which had exceeded $38 billion for the past two fiscal years, will rise to nearly $40 billion in the coming fiscal year—assuming that the budget recommendations are carried out. The President then discussed the nation's fiscal dilemma of providing more funds for defense spending without increasing taxes or throwing the budget too far out of balance. In the article beginning on page 302 by ERNEST R. ABRAMS, well-known New York city author of business articles, the suggestion is made that the nation's power needs could be met while at the same time increasing tax revenues available for defense spending. The author presents figures supporting the idea that the business-managed electric power industry—as a tax-paying partner—can be of real help in meeting the bill for missiles and sputniks.



ERNEST R. ABRAMS

* * * *

THE question of whether or not to adopt accelerated depreciation for income tax purposes has renewed discussion as to the need for and usefulness of property records. This controversy has prompted the special article featured on page 326 by E. G. HERY, manager, property record department of the Consolidated Edison Company of New York.

SOME readers situated in states where complete property records have long been required, may wonder why this question is even brought up at all at this late date. There are also some utility companies which have voluntarily gone in for such records, to ease the complications of tax accounting and for other reasons. But it may surprise many to learn that such recording practice is by no means universal, even though the operating situations requiring complete and accurate property records are becoming more apparent and widespread all the time.

BEGINNING on page 330 is a short article concerning a new conception of the corporate image. It is the product of JOHN B. DUBOIS, assistant advertising manager of Southern California Gas Company. In the realm of advertising and public relations this is a very timely topic and one of increasing importance. Yet, though it is a matter touched upon quite frequently, it is not always clearly understood. There is a growing awareness of the importance of public relations within utility management and increasing concern over the attitude of the consuming public in the light of continued and necessary rate cases. MR. DUBOIS' article, "Building the Company Image," is an attempt to focus this impression of the business corporation in a way which will stand analysis from the public relations viewpoint.

THE next number of this magazine will be out March 13, 1958.

The Editors

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The future, son! New homes, new towns, new industry . . . in the Heartland of America!

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Coming IN THE NEXT ISSUE

(March 13, 1958, issue)

★

OHIO BELL'S COMMUNITY LIVING PROGRAM

Why must the customer always be right? Utility public relations experts have long told us that this well-worn cliché is more applicable to public utility company promotional activities than to nonregulated competitive enterprise. John J. Joseph, vice president of the Ohio Bell Telephone Company, tells why this is so, in an enlightening article on Ohio Bell's Community Living Program. This is a long-range plan with the goal of educating every employee to the needs and benefits of substantial public relations. The employee is essential to this plan; but it has also stimulated many management people to examine their own attitudes toward the company, as they may appear to their neighbors and friends.

A LESSON IN LIMITING GOVERNMENTAL INTERVENTION

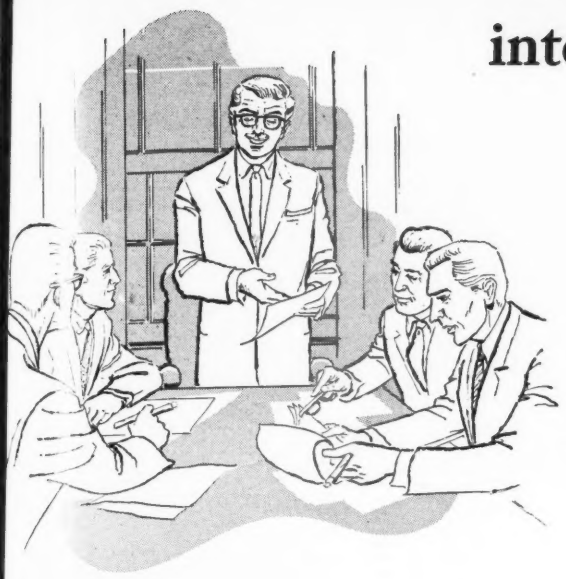
One of the old-fashioned economic axioms which has been exploded in Great Britain is the idea that Socialism or nationalization of industry is a one-way street. Karl Marx, and other Socialists of the extreme or Communist school, have gained a lot of unearned mileage out of the assumption that there can be no voluntary or democratic turning back from Socialism once started. They were sure that nothing short of a reactionary revolution or military defeat, after which the conqueror could impose his will, would permit the relinquishment of Socialism once established. But the experience of the steel industry in Great Britain shows that this notion is just about as wrong as many others preached by Marx. Dr. John D. Garwood, professor of economics at the Fort Hays Kansas State College, describes the denationalization of the British steel industry in a way which opponents of government ownership in this country will find interesting if not profitable.

DESALTING COULD BE JUST AROUND THE CORNER

Ocean brine and inland brackish waters may be freshened on a large scale in ten to fifteen years, say Interior Department engineers. And a "breakthrough" might come sooner. Industry will be the first customer, so utility and industrial engineers are advised to watch progress. A little government money has developed surprising results among private investigators. James H. Collins, author of business articles, explains what has been going on in the past five years, during which Uncle Sam has become directly interested in getting the salt out. Within a decade it is possible that the cry of the Ancient Mariner— "Water, water everywhere but not a drop to drink" —may be relegated to the status of a barroom joke.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***



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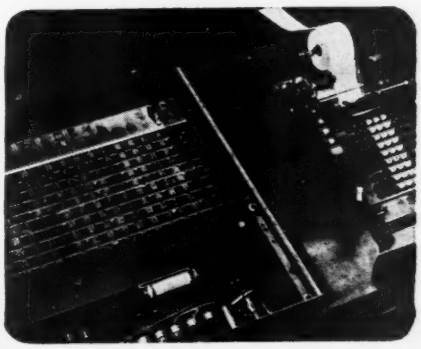

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"We shall vigorously pursue our efforts to convince regulatory commissions that the level of earnings should be raised."

HERBERT HOOVER
Former President of the United States.

"If you temporize with Socialism in any of its disguises, you will stimulate its growth and make certain the defeat of free men."

EDITORIAL STATEMENT
The Wall Street Journal.

"You can have everything for a while, including runaway inflation. One trouble with that program is that you end up with nothing."

C. D. KEMP
Director, Institute of Public Affairs, Victoria, Australia.

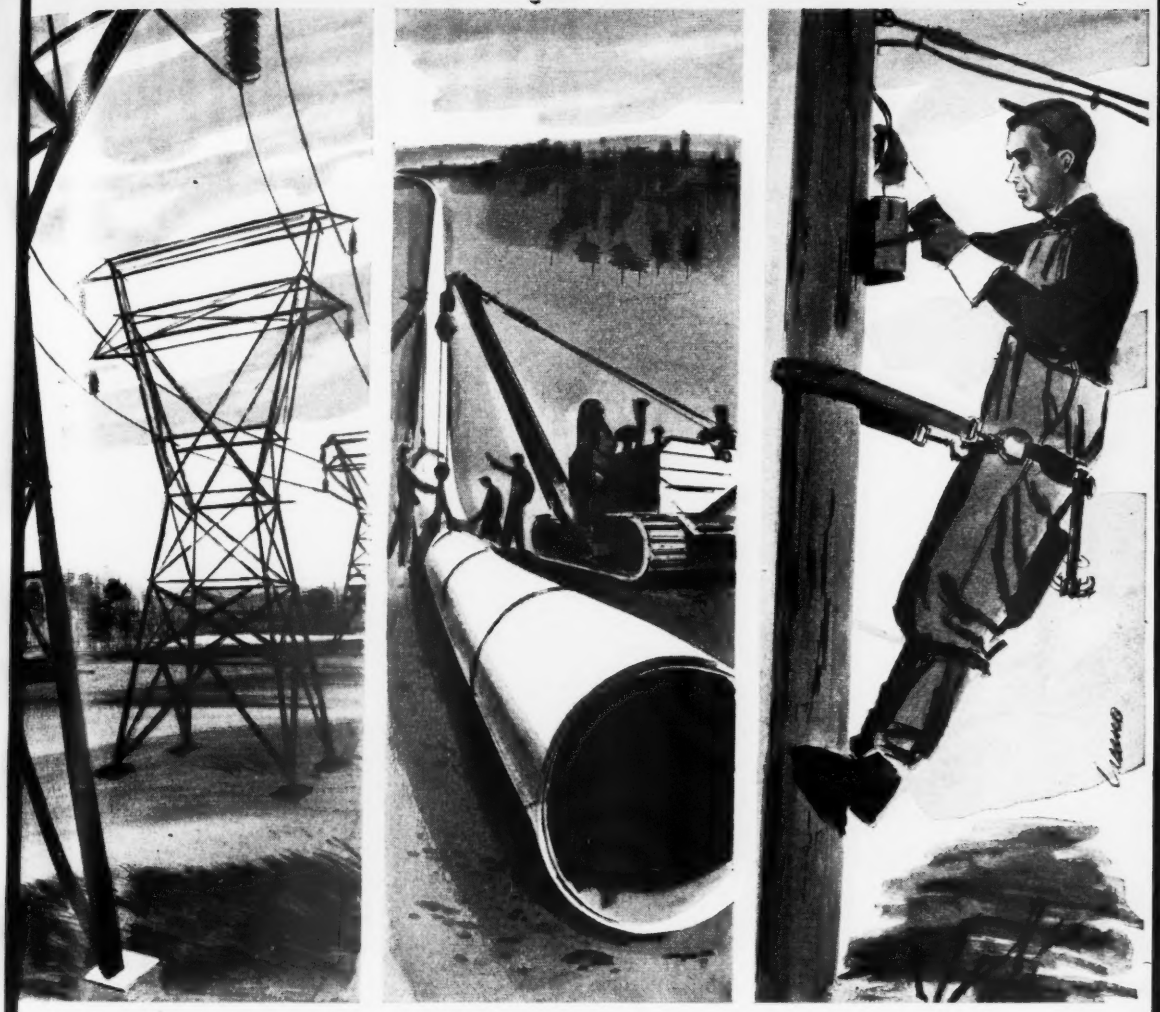
"When governments say things like: 'You must not produce that; you must produce this.' 'We will compel you to save more and to spend less.' 'We will tax and take away the great part of any extra earnings you may make as a result of your extra work, ability, or enterprise.' Then free enterprise is in danger."

RAYMOND MOLEY
Columnist.

". . . any attempt at a crash program by the government [to build atomic power plants] would not only be excessively expensive to the taxpayer, but would threaten private companies with a crushing government monopoly. Thus, any such program as is in the minds of public power-minded members of Congress might well delay rather than accelerate the progress which should be achieved in 1970 and after."

COLM BROGAN
British writer on political and economic subjects.

"The Welfare State is not only a fiscal and social machine. It is also a state of mind, and it is that state of mind more than anything else which is urging the young people of Cambridge (and elsewhere) to seek their fortunes abroad. In contemporary Britain it is considered only just that any man whose services to the community are of such value that he earns a high income should be stripped of most of it, not only to provide benefits for others, but also to show that he is really no better than the man whose contribution consists of sitting at a factory bench and pressing a button. Any man who conveys the impression that he is better than any other in any respect is regarded as the enemy of the egalitarian people."



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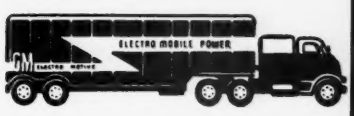

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Division Manager

We all feel that this is a program that is needed in the public utility industry.
Vice President

I know of no better source for obtaining information it contains.
District Manager

I am sure that this new publication will prove of great value in the training of our younger personnel.
President

All of the men are interested and believe the studies to be quite worthwhile to them.
Division Manager

I am sure the total series of 52 will prove of inestimable value to the utility industry.
Vice President & General Manager

I would like to have received it twenty years ago.
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I find the material very interesting and instructive.
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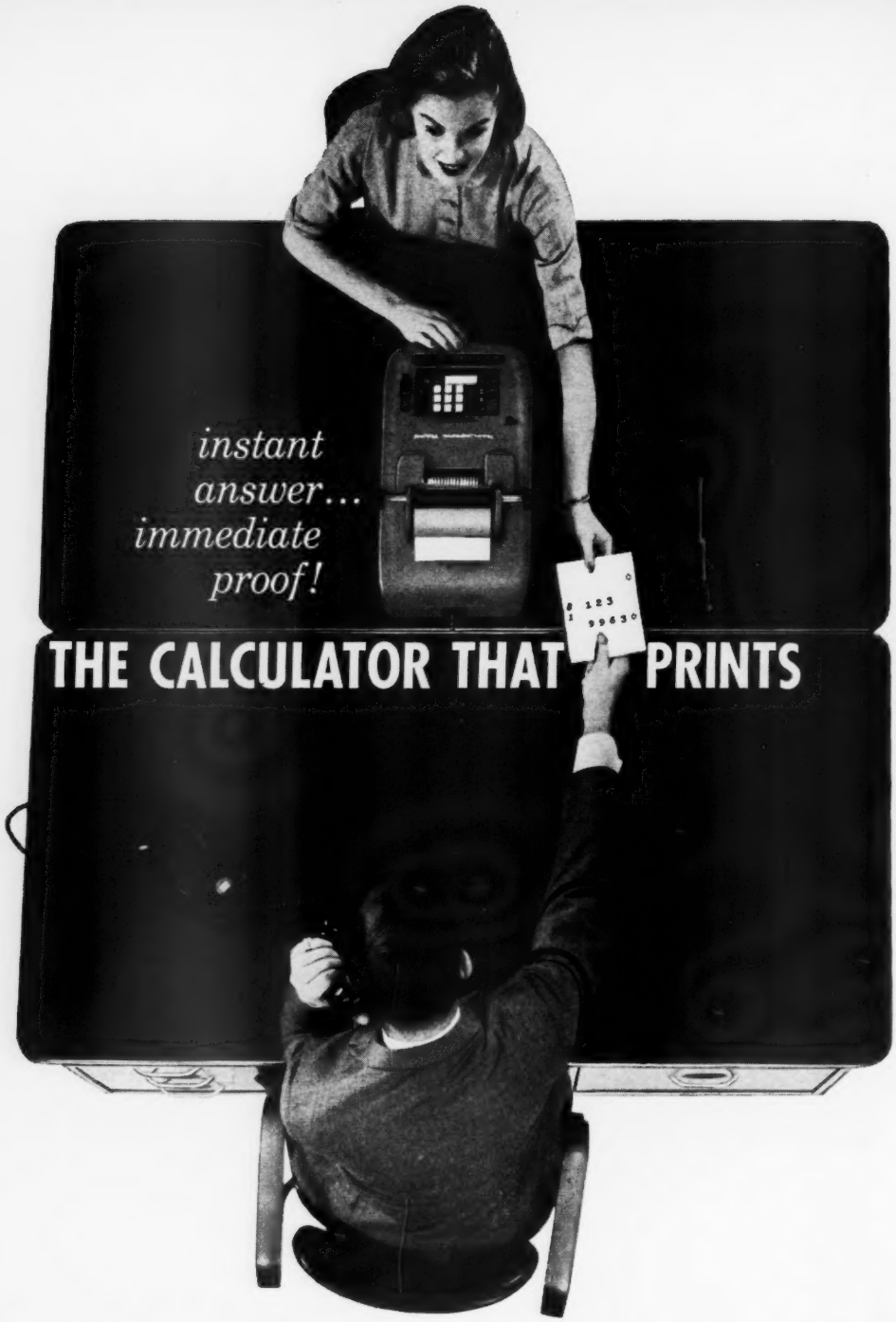

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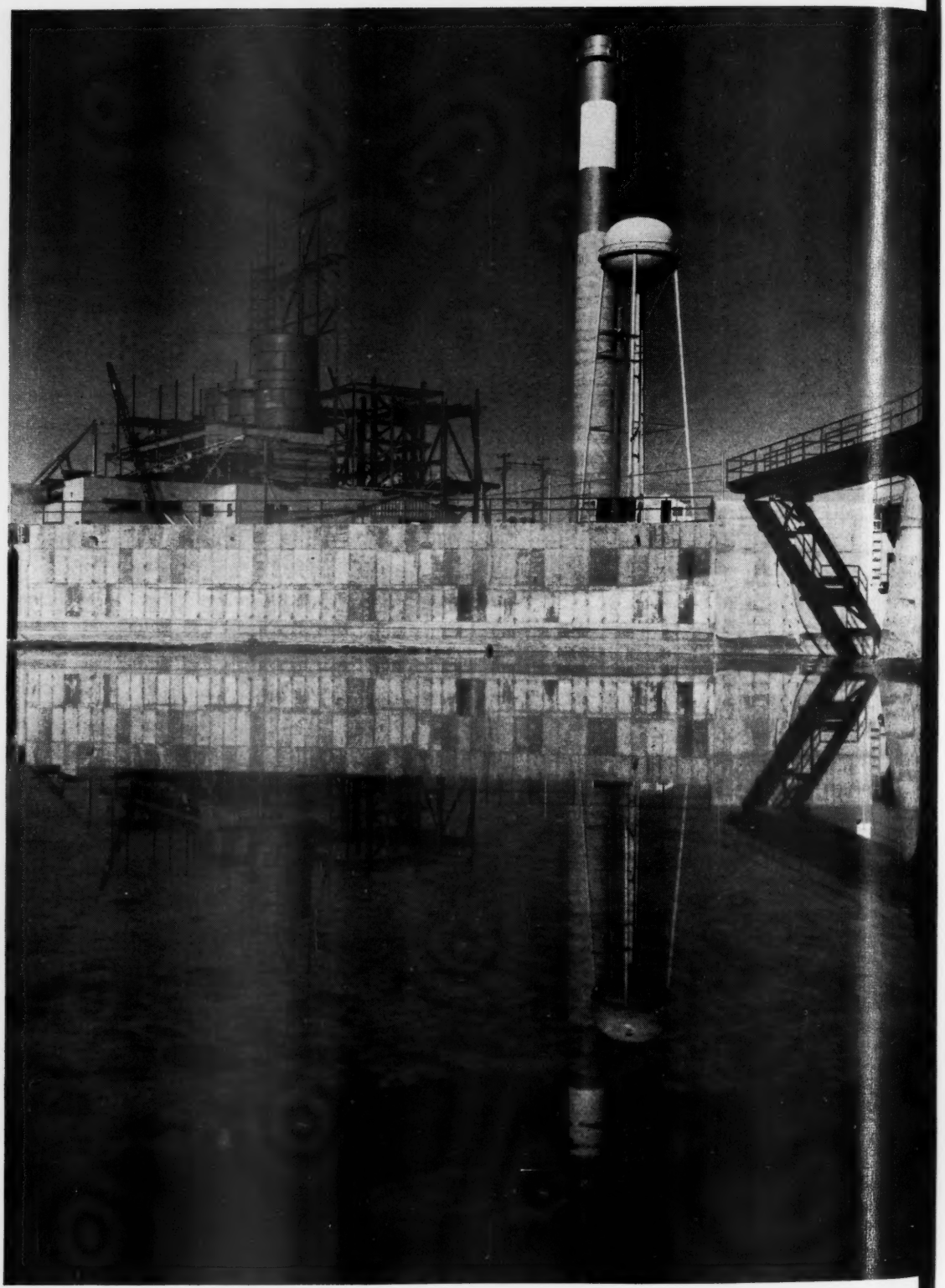
FEBRUARY - MARCH

Thursday—27 *Pennsylvania Electric Association, Electrical Equipment Committee, begins winter meeting, Pittsburgh, Pa.*	**Friday—28** *American Petroleum Institute, Southern District, ends 3-day meeting, Houston, Tex.*	**MARCH** **Saturday—1** *Interstate Power Club will hold meeting, New York, N. Y. Mar. 17.* ***Advance notice.***	**Sunday—2** *Southern Safety Conference, Inc., begins exposition, Memphis, Tenn.*
Monday—3 *Texas Telephone Association begins annual convention, Dallas, Tex.*	**Tuesday—4** *Kentucky Telephone Association begins annual convention, Lexington, Ky.*	**Wednesday—5** *National Association of Corrosion Engineers will hold meeting, San Francisco, Cal. Mar. 17-21.* ***Advance notice.***	**Thursday—6** *Pacific Coast Electrical Association, Business Development Section, begins meeting, Los Angeles, Cal.*
Friday—7 *New England Gas Association will hold annual meeting, Boston, Mass. Mar. 20, 21.* ***Advance notice.***	**Saturday—8** *Mid-West Gas Association will hold meeting, Colorado Springs, Colo. Mar. 24-26.* ***Advance notice.***	**Sunday—9** *Institute of Radio Engineers will hold national convention, New York, N. Y. Mar. 24-27.* ***Advance notice.***	**Monday—10** *Oklahoma Utilities Association will hold annual convention, Oklahoma City, Okla. Mar. 27, 28.* ***Advance notice.***
esday—11 *American Gas Association will hold general management section conference, Washington, D. C. Mar. 31-Apr. 2.* ***Advance notice.***	**Wednesday—12** *American Water Works Association, Kansas Section, begins annual meeting, Salina, Kan.*	**Thursday—13** *Public Utilities Advertising Association begins meeting, Montreal, Quebec, Canada.*	**Friday—14** *Gas Appliance Manufacturers Association will hold annual meeting, White Sulphur Springs, W. Va. Mar. 31-Apr. 2.* ***Advance notice.***



North Platte Mirrors Power Giant

Pacific Power & Light Company's 100,000-kilowatt Dave Johnston steam-electric plant under construction west of Casper, Wyoming.

Public Utilities
FORTNIGHTLY

VOL. 61, NO. 5 FEBRUARY 27, 1958

Electric Co-operatives Re-examined

Recently there appeared in this magazine an article which raised the question as to whether the co-operative form of business enterprise was a proper and desirable vehicle for electric utility service. This article, by the Honorable David A. Hamil, REA Administrator, gives the other side of the picture. Administrator Hamil outlines his reasons why he feels the electric co-operative is a proper and desirable form for utility-type operations in the rural areas.

BY THE HONORABLE DAVID A. HAMIL*
ADMINISTRATOR, RURAL ELECTRIFICATION ADMINISTRATION

IN my twenty months as Administrator of REA I have worked hard at better knowing the rural electric co-operatives and the electric power companies. I came to my present office in June, 1956, with a background of seventeen years of experience as a rancher-member of the co-operative which serves one of the two Hamil Brothers' ranches near Atwood, Colorado. As a customer and as a state legislator I also had considerable contact with the electric company in the area. I found much to admire in both operations. I also found that controversy between these two segments of the electrical industry was measurable by the extent of mutual misunderstanding of their respective achievements and aims.

*For additional personal note, see "Pages with the Editors."

Perhaps the greatest source of misunderstanding is the tendency to generalize from one experience, to attribute to the whole the faults or the inadequacies of a part. A great deal has been done toward replacing this approach with a more effective case-by-case settlement of differences. Industry-wide co-operation in programs such as the Inter-Industry Farm Electric Utilization Council has also furnished a vehicle for better understanding.

It is my feeling that many of the responsible leaders of the electric companies hold a more adequate and sympathetic view of the electric co-operatives than is evidenced in the Bennett Smith article in the September 26, 1957, issue of this publication.[1]

Electric co-operatives have proven themselves an effective vehicle for supplying electric service in rural areas. They are an important and productive segment of the American free enterprise system. Together with the electric companies and the publicly owned electric utilities they have in the span of two decades brought the percentage of electrified farms up from 10.9 per cent to 95 per cent, and are furnishing dependable, adequate power supply to over 4 million farms, homes, and other rural establishments. Many of them serve areas of our country which are the least favorably located in terms of density and economic opportunity. These offered little if anything in the way of profit to the electric companies. The unfulfilled need for electric service brought the co-operatives into being as a suitable means of satisfying that need.

[1] "The Co-op as a Vehicle for Power Service," by Bennett L. Smith. PUBLIC UTILITIES FORTNIGHTLY, Volume 60, No. 7, September 26, 1957, p. 442.

The Co-operative Structure

As Bennett Smith points out, there are structural differences between the co-operative and profit corporation forms of business enterprise. These differences cannot be generalized. The details of co-operative organization and operation vary from state to state. In some states, the co-operative is organized on a stock basis under the very same act used by a power company; in others as membership associations. Sometimes there is a choice available to the incorporators. The actual selection does not normally vary the form or organization. The co-operative principle of one member, one vote, is uniformly followed. The enabling acts vary as to limitations on service. Under some statutes service may be limited to members or to a stated percentage of nonmembers. Some limit service to rural areas which are defined. Others provide no limitations. In making loans for electric service REA requires compliance with applicable state laws. Beyond that the organizational structure of the REA borrower is left where it belongs—with the consumer-owners.

No substantial disadvantage or handicap has been experienced by the rural electric system which can be attributed to organization as a co-operative. In a few states provisions of the co-operative statute have been judicially interpreted in such a manner as to require operational adjustment. Sometimes it is found necessary to seek legislative revision of these provisions.

Mr. Smith suggests that the co-operative method and public utility service are contradictory. Yet it is a fact that in half of the states wherein they operate electric co-operatives are either completely or partially treated as public utilities.

ELECTRIC CO-OPERATIVES RE-EXAMINED

Does the co-operative form of organization make for irresponsibility of management? No one who has come in close contact with the rural electric systems would answer this in the affirmative. In the country over, hardly a week passes without rejection of this thesis in the form of well-attended annual meetings of the member-stockholders of several electric co-operatives. Millions of rural people come together annually, and more often as the occasion arises, to discharge their duties and exercise their prerogatives as owners of the electric utilities which serve them.

Participation by the corporate owners of these enterprises far exceeds that of the owners of any comparable venture. The owners select from among themselves director-trustees who meet monthly or more often to consider and lay down management policy and to oversee their carrying out by carefully selected, paid managerial personnel. Yes, there is "fragmentation of duty," but this is a source of strength rather than weakness for the co-operative organization. No amount of supervision furnished by a government agency can substitute for the widespread grass-roots participation and support which are the rule and not the exception in the electric co-operative systems. Neither the passage of time nor the complete repayment of government loans, which has occurred in several places, has brought the forces of irresponsibility into play.

Rates, Margins, and Refunds

There are fundamental differences between co-operatives and electric companies. Their corporate objectives are not alike. The former exists as a means of bringing electric service to its consumer-owner at cost. The latter must and should operate so as to earn a return on the investment of its stockholders who may or may not be users of its service. The difference in short is between profit and non-profit operation.

A co-operative fixes its rates to its consumers at levels which are estimated to be adequate to meet the cost of its service and the return to the government of the funds loaned to make this service possible. The latter requirement entails, of course, the charging of rates at a level higher than the bare costs of operating the enterprise.

Consumer capital must be brought in to replace capital borrowed from the government which is repayable within terms of the loan. In the accrual accounting system employed by the co-operative, conforming closely to the Federal Power Commission system, such capital appears on the

¶ "Electric *co-operatives have proven themselves an effective vehicle for supplying electric service in rural areas. They are an important and productive segment of the American free enterprise system. Together with the electric companies and the publicly owned electric utilities they have in the span of two decades brought the percentage of electrified farms up from 10.9 per cent to 95 per cent, and are furnishing dependable, adequate power supply to over 4 million farms, homes, and other rural establishments.*"

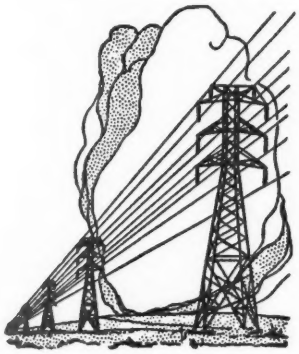
books as net margins unless and until it is assigned to the patrons as patronage capital. Roughly two-thirds of the electric co-operatives have taken formal action toward recognizing and recording net margins as patronage capital. Without exception, the enabling laws under which co-operatives are organized, their articles of incorporation or their bylaws, give due recognition to their patrons' right to share in the distribution of net margins whenever it occurs. Such participation is extended to members and nonmember patrons alike. In a few instances, cash refunds have been paid, returning the excess of charges in earlier years over costs of operation in those years.

REGARDLESS of the method employed, the consumers served by electric co-operatives are the owners of the enterprise. The net worth of the co-operative reflects their investment whether it be in the form of membership fees or earned net margins and however the latter are reflected on the books.

Production and marketing co-operatives, as well as consumer co-operatives, furnish different kinds and types of services and commodities to different patrons. The prices charged reflect as closely as possible the cost of the service or product. Electric co-operatives similarly charge different rates for different types of service through rate schedules formulated in accordance with recognized and accepted rate-making techniques and standards. In fourteen states regulatory bodies exercise supervision over co-operative rates. But whether regulated or not the electric co-operative practices no discrimination between patrons receiving the same classification of service. It can and does impose demand charges where the nature of the service requires and offers incentive rates to encourage off-peak use. And it does these things entirely in line with co-operative principle. There is no "co-operative gospel of one price per member." Co-operative principle requires the same price per patron for the same class or kind of service or product. Electric co-operatives practice this principle and it works out fairly to all.

THE differences in capital contributions made by patrons receiving various classes of service can be and often are reflected in the patronage capital credited to the individual patron. There is sufficient flexibility in plans which have been placed in operation to eliminate the possibility that a user furnished energy at a rate only slightly over cost will be credited with patronage capital or given a patronage refund in an amount sufficient to reduce the charge for service below cost to the supplier.

Termination of membership does not, as Mr. Smith puts it, end "patronage for both the member and the co-operative" nor is membership uniformly nontransferable. Patrons' rights are determined by the laws under which co-operatives are organized, their articles, and their bylaws. Where patronage capital has been recorded and assigned on the co-operative books of record, neither resignation, expulsion, nor death will operate to extinguish rights in capital so credited whether it be to a member or nonmember patron. Normally, patrons who discontinue service or the heirs of deceased patrons are not immediately entitled to the return of patronage capital and must await a general retirement of capital furnished during a given



REA's Continuing Responsibility

"WITH 95 per cent of our farms electrified, there are some who say that the electrification job for which REA was established is done. Loans should taper off and co-operative expansion cease, they say. This is no more true of the electric co-operative systems than it is of the electric company systems. Each has a continuing responsibility to meet all demands for service and to render dependable service in its areas. Consumption of electricity in rural areas continues to grow beyond the most optimistic estimates of the mid-thirties when REA was established."

period. However, the director-trustees may, where the statutes, articles, or by-laws permit, adopt a policy of returning such capital upon decease of a patron.

EVEN where patronage capital is not recorded and credited, termination of membership does not always foreclose participation in the disposition of assets remaining upon dissolution after payment of debts and other liabilities. Statutory requirements vary. In some states all members and former members participate in proportion to their patronage at any time. In others sharing is based on patronage during the seven years preceding dissolution. And some state laws limit participation to members at the time of dissolution. The very nature of the electric co-operative enterprise minimizes the importance of participation in assets remaining on dissolution. What is important is recognition of patronage capital furnished by all patrons, whether members or not, as an incident to the periodic payment for service rendered. As with the passage of time net worth of the systems is being built, more and more of them are taking appropriate steps to record and credit such capital contributions.

Tax Treatment of Co-operatives

ELECTRIC co-operatives, like the electric companies, pay those taxes which are

imposed upon them by state and federal laws.

Exemption from federal income taxes is available to those electric co-operative systems qualifying under provisions of the Internal Revenue Code which were placed on the statute books before REA was established and which are applicable to organizations of varying kinds and purposes. There is no specific statutory exemption for electric co-operatives as such. To qualify, documentary evidence must be furnished to the Internal Revenue Service that the applicant is in fact organized and operating on a nonprofit basis. The payment or provision for payment of dividends disqualifies a co-operative.

We have already seen that net margins occur in electric co-operative operations due to the need for funds with which to amortize long-term debt to the government. Where the revenues creating these margins represent, pursuant to the co-operative statutes, articles, bylaws, or contracts, moneys furnished to the co-operative by patrons for capital purposes, they do not constitute gain, earnings, or profits. This is true also for commercial corporations operated for profit. These concerns commonly raise a substantial part of their capital by the sale of their securities to investors who may or may not patronize them. An electric co-operative is initially capitalized by subscriptions in nominal amounts to its membership or stock. Most of its capital is represented by long-term government loans. These loans are by their terms repayable with interest. The co-operative must obtain from its patrons the funds needed not only for its operating costs and expenses but also sufficient cash to meet its periodic payments on its long-term debt. Where these latter amounts are recognized and recorded as patronage capital replacing government capital, they are distinguishable from earnings which would otherwise be taxable. They are not taxable corporate income and would not be such even if the statutory exemption were erased from the books.

Ad valorem taxes are levied by the state or its political subdivisions against the property of electric co-operatives in most states. In Montana, Ohio, and Utah the legislatures have specially classified such property for assessment purposes. In Mississippi and North Carolina it is exempt from taxation. In South Carolina all rural electric property, regardless of ownership, is exempt. And in Georgia and Louisiana exemption for a stated period of years has been legislated for electric co-operative property. Seven states provide for payments in lieu of property taxes based either on gross receipts or number of members. In most of these states real estate belonging to the co-operatives is fully taxable. In the remaining states electric co-operatives pay property taxes under the same statutes and procedures as are applicable to the commercial companies.

Where special tax treatment for electric co-operative property is found it represents legislative recognition of the nonprofit nature of the operation and application of the principle of adjusting taxation to ability to pay. It may be noted that commercial utility property is given special tax treatment, in which the co-operatives sometimes share, in some jurisdictions.

It is claimed by Mr. Smith that the vice of special tax treatment is that the co-operative consumer substantially avoids or escapes the burden of taxes as a price ad-

ditive while the commercial company's customer pays a rate which includes such taxes. Let us look at the average revenue or charge per kilowatt-hour sold. (See table below.)

So long as the co-operatives' average revenue or charge per kilowatt-hour stays above that of the commercial companies it is extremely unlikely that "more and more persons will escape taxes by becoming members of co-operatives." Mr. Smith's fears are groundless.

WHAT of the effect of special tax treatment upon the net margins of the co-operatives? Is their relationship to gross revenues higher than in the case of the commercial companies because of their tax situation? Again let us examine the record:

	Net Margin or Income: Percentage Of Operating Revenues	
	274 Class A and B Utilities (1)	*REA Borrowers (2)*
1952	14.4	7.6
1953	14.4	8.5
1954	14.9	10.8
1955	14.9	13.1

Source, (1) Federal Power Commission, *Statistics of Electric Utilities in the United States—1955—Privately Owned*, Table 5. (2) REA, *Annual Statistical Report—1955*, Table VIII.

In this respect it is evident that tax treatment gives the electric co-operatives no financial advantage.

What happens to the net profit of the commercial companies and to the net margins of the co-operatives? The table on page 296 shows the disposition, in terms of percentage of operating revenues, of the commercial companies' net income.

During the period reflected in the table on page 296, an average of about three-quarters of the companies' net was appropriated to dividends, one of the best regarded "things of corporate existence."

During each of these same years payments on long-term debt by the electric co-operatives exceeded net margins. These went to buy corporate existence itself.

The Government's Rôle

. . . each borrower is an entirely independent corporate body, locally owned and controlled, subject to applicable state laws and responsible for the management of its own affairs, including proper and successful construction and operation of its system and repayment of the REA loan.

. . . the underlying objective shall be to move as far and as fast as is feasible toward a situation in which every borrower possesses the internal strength and soundness to guarantee its permanent success as an independent local enterprise.

AVERAGE REVENUE PER KILOWATT-HOUR

	Residential or Domestic Sales		*Commercial and Industrial Sales*	
	274 Class A and B Utilities (1)	*REA Distribution Borrowers (2)*	*274 Class A and B Utilities (1)*	*REA Borrowers (2)*
1952	$2.85	$3.35	$1.52	$2.28
1953	2.84	3.22	1.52	2.26
1954	2.80	3.09	1.54	2.22
1955	2.77	2.98	1.46	2.18

Source, (1) Federal Power Commission, *Statistics of Electric Utilities in the United States—1955—Privately Owned*, Table 9. (2) REA, *Annual Statistical Report, 1952-55.*

THE foregoing are excerpts from the statement of basic policy governing REA's relationship with its borrowers. Great strides have been made toward achieving the stated objective. Success in this direction can be measured only in terms of individual co-operatives. The *Annual Statistical Report* published by REA furnishes the interested public with the facts needed to appraise the financial condition of each rural electric system financed by REA. These reports also portray the steady growth of the systems in terms of physical plant and of service to rural people.

There is no evidence of diminishing interest or responsibility in the owners and managers. They are accepting and discharging their obligations to themselves, their neighbors, and their banker, REA. The 1956 *Annual Statistical Report* shows a constantly diminishing number of borrowers with deficits in net margins. As of October 31, 1957, delinquencies of more than thirty days totaled less than $100,000 in principal and interest—0.004 per cent of the balance of principal and interest outstanding on electrification loans. REA practice is to concentrate its assistance to those borrowers whose operations indicate need therefor. As to the others, REA's interest and activities are primarily devoted to conservation of the government's security interest.

LABELING the electric co-operatives as government power and state Socialism is evidence of misunderstanding. That they are neither is fairly universally understood. The electric companies have their place, a very important one, in the utility community as do the nonprofit co-operative utilities, the municipal utilities, and the government power agencies. All segments of the electric utility industry use and profit from public power. All of them receive other government assistance and service. It would be ridiculous to label as state Socialism an electric company enjoying the benefits of accelerated depreciation certificates. It is just as absurd so to label an electric co-operative because it borrows capital from the government which it will repay with interest.

In recent months there has been considerable agitation over the 2 per cent rate fixed by law for REA loans. There are several bills before Congress to increase the rate. The interest charged on outstanding loans cannot be increased. As for future loans, it is REA's job to administer the law as written by the Congress.

Looking Ahead

WITH 95 per cent of our farms electrified, there are some who say that the electrification job for which REA was established is done. Loans should taper off and co-operative expansion cease, they

	1952	*1953*	*1954*	*1955*
Net income—per cent of operating revenues	14.4	14.4	14.9	14.9
Dividend appropriations--per cent of operating revenues:				
Preferred stock	2.0	1.9	1.9	1.8
Common stock	9.1	9.0	9.5	9.5

Source, Federal Power Commission, *Statistics of Electric Utilities in the United States—1955—Privately Owned,* Table 5.

say. This is no more true of the electric co-operative systems than it is of the electric company systems. Each has a continuing responsibility to meet all demands for service and to render dependable service in its areas.

Consumption of electricity in rural areas continues to grow beyond the most optimistic estimates of the mid-thirties when REA was established. The rural scene itself is changing, with clusters of nonfarm establishments taking over where once a single farm stood. Industry and commerce are bulging out of city limits and city limits are expanding everywhere. We are witnessing dynamic changes in our population and its needs for electric and all kinds of service. When these changes occur in the service areas of co-operatives they must equip themselves to meet the greater demands upon them. This means more and heavier facilities, new and expanded power sources.

I have said, and I repeat, that projecting the recent rate of growth and development of the rural electric systems, it is not unreasonable to forecast an annual need of a billion dollars new capital within the next generation. Whether these vast sums will continue to be furnished by the Congress through REA, as they have been in the past, cannot be foretold. REA borrowers have been urged to examine alternatives which are consistent with the discharge of their responsibilities. I have every confidence that they will find the right answer and that they will go on meeting all service demands as in the past.

WE have reached a condition of better understanding between the co-operative and electric company systems. It has taken hard work and sincere willingness on both sides to break down some of the barriers which were erected by lack of mutual understanding and co-operation. To do the job facing all of us in these changing times, we must all work hard at improving our understanding, tolerance, and co-operation.

"ACCEPTANCE *of the popular belief that the day for cheap nuclear power is almost here—if it has not actually arrived—and that its arrival will solve many of the world's economic and political ills is dangerous.*

"Such a myth is dangerous in our own domestic undertakings and—what is more important—it is dangerous in our international dealings. The United States cannot afford to give her friends a false impression of what nuclear power can do or where the nation stands in its development.

"In this field of atomic power one must be extraordinarily careful to distinguish between what people hope to do and what they are doing or have done.

"The power reactor development business has been plagued with estimates for 'economic'—in quotation marks—nuclear power reactors. No one has ever built such a reactor. No one is building any now. We do not today know how to build them—and neither do the estimators."

—W. KENNETH DAVIS,
Director, division of reactor development,
Atomic Energy Commission.

Taconite—A New Symbol Of Free Enterprise

When an older industry fades from its familiar place in the landscape, finding a new one to replace it is like finding gold in the back yard. The northernmost Central states were put in some such position when the richer iron and copper deposits became pretty well worked out. Necessity bore fruit again and a method of reducing the lower-grade, flinty ores was invented. Utilities, sharing in the boom, reflected this renaissance.

By JOHN P. CALLAHAN*

WHEN you speak of taconite, you speak in superlatives.

Beyond its limited geological connotation—one of the hardest rocks in the world—taconite is a synonym for American ingenuity.

It is a new symbol of free enterprise, encompassing a reaffirmation of investor faith in industry, and the application of scientific-engineering skills to overcome one of nature's biggest challenges: finding a substitute for a once "limitless" supply of high-grade iron ore to feed the voracious appetites of the iron and steel industry's blast furnaces.

EMPHASIZING the urgency of the challenge to a vital, basic industry, the nation's main source of supply of high-grade iron ore, the Mesabi Range in the Lake Superior district of Minnesota, is nearing depletion; not imminent, but at a rate that has caused concern: more than 100 million tons a year and the probability that the rate of consumption will increase. During the past hundred years the Mesabi Range has yielded about three billion tons of the ore.

*Correspondent, *The New York Times;* free-lance writer on business topics.

With that picture in mind we turn back, briefly, to 1912, the year when a 24-year-old mathematics instructor at the University of Minnesota was asked to perform a virtual miracle in metallurgy —extract iron ore from a useless piece of rock called "taconite." After several years the instructor, now Professor Edward W. Davis, succeeded.

But only on a laboratory scale. Commercial extraction of the iron ore was a mechanical impossibility; taconite was three times as hard as limestone, twice as hard as granite. There was no machinery capable of transforming the rock into pellets for use in blast furnaces.

Thus was born a challenge that called for resources greater than the individual's. Men and machinery, backed by the funds of "little" people who had faith in the future of American enterprise, combined in the same pioneer spirit of earlier generations. And now, more than forty years later, with multimillions of dollars of research effort, a new industry has been developed. The challenge has been met and the nation's steel mills are assured of an abundant supply of the basic raw material for iron and steel for many generations.

What happens when a piece of rock becomes the symbol of a new industry, of an era that steel masters call "The Taconite Age"? What "aside" good comes of it?

The first question leads us to an impressive answer in the verdant north shore of Lake Superior where the Reserve Mining Company has spent $190 million on the first processing plant. Forty-seven miles to the northwest of the lake the company has its big taconite mining operation in the town of Babbitt. Its iron-ore pellets are being produced at the rate of 4 million tons a year for shipment down the lakes to the blast furnaces of Republic Steel Corporation and Armco Steel Corporation, joint owners of this first taconite operation.

Erie Mining Company has spent $300 million on its taconite project at Aurora, and the United States Steel Corporation's Oliver mining division is engaged in a $25 million taconite development in Virginia, Minnesota.

The estimated investment in this great new industry within twenty years will be $1.5 billion!

Citing but one instance of the investor interest in the taconite industry, a group of leading life insurance companies bought $148 million of Reserve Mining's bonds to finance the operation.

Impressive, too, are some of the statistics relating to the awesome extracting and refining processes involved in taconite mining operations. Much taconite lies in an ore body nine miles long, 2,800 feet wide, and 175 feet deep at its thickest point, at the eastern end of the fabulous 100-mile-long Mesabi Range. That ore body contains at least 1.5 billion tons of taconite that will yield 500 million tons of high-grade ore.

Some estimates place the taconite supply in and around the Mesabi Range as high as 60 billion tons. More conservative calculatives arrive at the figure of 24 billion tons. Since it takes about three tons of taconite to produce one ton of pellets, the lower estimate would indicate about eight billion tons of iron-ore reserves in the form of taconite. The ranges of Wisconsin and Michigan have additional large

¶ "THE *taconite industry is new. But its formula for growth is unchanged since the birth of industry: first, the challenge for a better way, an improved method; then the pioneer enthusiasm that meets the challenge. It is the American Way, bringing good to industry and to the people who benefit from it, either as investors or employees. Taconite is an outstanding example of how industry is creating enormous new demands for electric power. In addition to that, Minnesota Power & Light has gained thousands of new residential and commercial customers in the satellite towns surrounding the taconite mining and refining operations. But this is only part of the bigger utility story that is unfolding in virtually every section of the country.*"

tonnages of other iron-bearing ores.

As for some of the other statistics, one estimate has it that the investment per worker in a typical plant amounts to more than $86,000, compared with $12,500 per job in all manufacturing. The overall taconite operation, from mining to shipped pellets, requires three times as many men per ton as are required for directly shipped, open pit iron ore.

Pointing up the crush resistance of taconite, the equivalent weight of fifteen motorcars, bearing down on one square inch, is required to crush the rock. Preliminary to crushing it, the taconite has to be blasted out and one crew along a rock face spent two days stuffing 127,000 pounds of explosive powder in cans into 180 holes.

At Reserve Mining's Babbitt terminal, 47 rail miles from the lake, the 110-car trains get their taconite from the largest crushers in the world. The crusher is 170 feet high and it grinds chunks of taconite five feet wide to fist size. The 60-inch gyratory crusher weighs 1,250,000 pounds and it is driven by two 500-horsepower motors. Its mouth breaks up the taconite at the rate of 3,500 tons an hour.

A FEW more statistics and we shall get to the second question: What "aside" good comes of taconite operations?

To get one ton of iron-ore pellets, three tons of rough taconite must be drilled, blasted, mined, transported, ground to dust, separated, rolled into balls, and baked.

Five pounds of steel in various forms of equipment, including rods and balls, are ground to powder for every ton of pellets produced.

Each ton of pellets requires 85 kilowatts of electricity and fifty tons (10,000 gallons) of water. The typical plant used 105,000 gallons of water a minute.

Abrasion-resistant steel teeth on the huge shovel dippers must be replaced after every eight-hour shift.

BEHIND the impressive array of statistics are thousands of persons sharing the pioneering excitement of a new industry. In the Reserve Mining operation alone, more than 10,000 employees have settled in new cities and towns of Minnesota. Executive and worker are living in brand-new communities where not more than a decade ago there was vast wilder-

ness inhabited by wildlife seldom disturbed by man. Today, utility lines arch the sky, carrying an ever-increasing supply of telephone and electric services. New highways are paralleling the new railroad tracks and carry thousands of men, women, and children to offices, expanding shopping centers, and schools.

The Minnesota Power & Light Company which operates power plants on three of the nation's great watersheds in the state, has had to double the initially proposed size of the Clay Boswell steam-electric station from 65,000 to 130,000 kilowatts of capacity.

While the taconite plants generate their own electric power supply, Minnesota Power & Light has signed an interchange agreement with Erie Mining. A similar agreement was signed in 1954 with Reserve Mining, and the utility company is providing power for taconite pilot plants of the Oliver division of United States Steel.

In its annual report for 1956, Minnesota Power & Light showed industrial revenues from the iron-ore mining industry, including taconite operations, of $8,055,659, for 1956. This compares with $7,615,218 in the previous year and $5,409,713 in 1952.

THE utility's expansion plans include an expenditure of $25 million for the enlarged steam-electric generating station named after its president, Clay C. Boswell.

Other expansion requirements, including lines, substations, and related facilities to meet the expanding residential and commercial demands, will cost $16 million through 1959.

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But this is only part of the bigger utility story that is unfolding in virtually every section of the country.

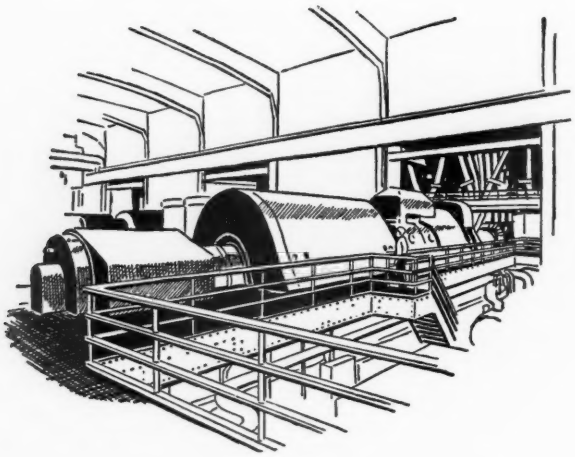
In the midst of a continuing industrial expansion program throughout the nation, the power and light industry is part of, and frequently the leader in, concerted drives to help industry expand.

"THE world we live in is one in which nearly all of the pressures are in the direction of conformity to a mass pattern, in cars, in clothes, in food, in music, entertainment, and all other aspects of life.

"Certainly this is not the American ideal. It was to escape from these kinds of pressures that many of our forefathers and mothers came to this continent.

"Our great danger in our age is the tyranny of conformity."

—NORMAN A. M. MACKENZIE,
President, University of British Columbia.



Plenty of Power—And Sputniks, Too

This article suggests that the nation's power needs could be met while at the same time increasing tax revenues available for defense spending. The author presents figures supporting the idea that the business-managed electric power industry — as a tax-paying partner—can be of real help in meeting the bill for missiles and sputniks.

By ERNEST R. ABRAMS*

Ever since the Communists shot their first sputnik into space in early October, numerous suggestions have been made by individuals and governmental agencies as to methods of providing the federal funds necessary to finance the construction of satellites and intercontinental ballistic missiles, and still keep our national economy on an even keel. But they all agree in the final analysis that if the federal debt is not to be greatly expanded, if federal taxes are not to be raised to crippling proportions, and if we are to avoid deficit spending, nonessential outlays of the federal government must be curtailed sharply. Where to cut federal spending in a congressional election year now appears foremost in the minds of politicians.

The special study of federal defense outlays, sponsored by the Rockefeller Brothers Fund, Inc., recommended increased defense spending in yearly steps of $3 billion during the next four fiscal years—$3 billion in fiscal 1959, $6 billion in fiscal 1960, $9 billion in fiscal 1961,

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and $12 billion in fiscal 1962—or a total of $30 billion in the four fiscal years starting with July 1, 1958. In his State of the Union message, President Eisenhower asked Congress for an immediate $1,260,000,000 for missile-age military activities and authority to switch another $110 million already on hand to such projects.

AGAIN, in his Budget message, the President noted that defense spending, which amounted to $38.4 billion in fiscal 1957 and to $38.9 billion in fiscal 1958, will rise to $39.8 billion in fiscal 1959. As one method of providing the required funds, after noting that 407 new water resources and power projects had been started in the past three fiscal years, he recommended that no new water resource and power projects be started in fiscal 1959, but that work be continued on the 309 projects now under construction by the Bureau of Reclamation and the Army Engineers.

As might be expected, an immediate howl was raised by many members of Congress with pet schemes for the expenditure of vast federal sums in their own districts on water and power projects, no matter whether or not the nation was protected. Yet, it would appear that, with private enterprise wholly capable of meeting every conceivable demand for electric energy over the foreseeable future, expansion of electric facilities in this time of crisis should be left to the investor-owned electric utilities.

THE Hoover Commission's Task Force on Water Resources and Power made this observation: "It is in the field of hydroelectric development, perhaps more than any other type of water resource work, that . . . the federal government has invaded a domain that should be served by nonfederal enterprises." Between 1824, when direct federal activity in water resource development began, and June 30, 1954, the Task Force found the federal Treasury had disbursed $14.3 billion on water resource and power projects, of which $11.6 billion was capital outlay and the balance went for planning, operating, and maintenance.

Of this total, approximately $8.9 billion was spent by the Army Engineers, $3.1 billion by the Reclamation Bureau, and $1.6 billion by the Tennessee Valley Authority, just to mention the big outlays. Moreover, by June 30, 1953, the Task Force found that the federal government had constructed or purchased 68 hydroelectric and 12 steam-electric generating plants with an installed capacity of 10,496,000 kilowatts, while 31 additional hydro and four steam plants with a capacity of 9,761,000 kilowatts were under construction.

More important, $3,873,500,000, or almost 27 per cent of the $14.3 billion total, had been allocated to electric power production, transmission, and distribution facilities. As of June 30, 1955, federal water resource and power projects already authorized called for a further federal outlay of $18.5 billion and, according to estimates of the Army Engineers and calculations of the Task Force, could run as high as $70 billion.

IN 1933, the installed generating capacity of federal power projects amounted to less than one per cent of the total capacity of the country available for the public supply but, by 1953, the federal government had become the largest single pro-

ducer of electric energy in the United States with 12.4 per cent of total capacity and an output of 13.1 per cent of the nation's electric supply. Moreover, federal power projects under construction and authorized in 1953 could double federal generating capacity by 1960 and triple it eventually to reach the vast total of 34,753,000 kilowatts.

This federal invasion of the field of electric generation and sale might be justified to some extent, if federal power projects paid their own way and did not have to be subsidized by the taxpayers, many of whom are in no way directly benefited. According to the findings of the Task Force, seven of the major federal power projects showed a combined deficit, after providing for all operating expenses, computed federal, state, and local taxes, and interest at 3 per cent, of more than $75.6 million in the 1953 fiscal year, and aggregate deficits to the end of fiscal 1953 of nearly $331.6 million. Of the total deficit, the Columbia river basin projects accounted for 29.1 per cent, Hoover dam for 30.5 per cent, and TVA for 30 per cent, but these proportions are thrown out of line because the Central Valley project in California, amazingly, reported an actual surplus in earnings, as previously defined, of nearly $8.6 million.

CONSIDERING TVA alone, 77 per cent of whose power facilities had been financed at June 30, 1956, through federal appropriations and 23 per cent through expenditure of power revenues, Edison Electric Institute found in its July, 1957, study that if TVA had paid interest on the federal funds invested in its power facilities at the same rate paid by the class A and B electric utilities on the private funds they engaged through the sale of securities, and if TVA had paid federal, state, and local taxes at the same rates paid by

TABLE I

EXPENDITURES FOR FEDERALLY OWNED PROJECTS WITH POWER INSTALLATIONS TO JUNE 30, 1955, AND BURDENS TO STATES BASED ON THEIR FEDERAL TAXES

State	*State's Share of 1955 Federal Taxes*	*1950 Population*
Connecticut	$ 131,041,000	2,007,280
Delaware	36,245,000	318,085
Illinois	529,043,000	8,712,176
Indiana	167,983,000	3,934,224
Kansas	68,309,000	1,905,299
Louisiana	76,673,000	2,683,516
Maine	25,790,000	913,774
Maryland	152,649,000	2,343,001
Massachusetts	225,837,000	4,690,514
New Hampshire	18,820,000	533,242
New Jersey	258,597,000	4,835,329
New York	1,042,055,000	14,830,192
Ohio	436,338,000	7,946,627
Pennsylvania	496,282,000	10,498,012
Rhode Island	36,245,000	791,896
Vermont	10,455,000	377,747
West Virginia	46,004,000	2,005,552
Wisconsin	139,405,000	3,434,575
Total—18 States	$3,897,771,000	72,761,041
Total—48 States	$6,979,260,000	150,697,361
Proportion of 18 States	55.92%	48.28%

the investor-owned power companies (ignoring the $239.4 million in back taxes it failed to pay), its rates would have had to be increased by $91 million during fiscal 1956 to cover all operating costs, taxes, and capital hire before it could break even. And this would have left nothing in reserve earnings or surplus to provide for future contingencies or contributions to expansion.

Nor is TVA the only sizable federal power project failing to pay its own way. According to the audit report of the Bureau of the Budget for the 1956 fiscal year, the Missouri river basin project, with total operating revenues for the year of $15,012,356, reported a loss before federal taxes and interest of $4,936,166. Similarly, the Southeastern Power Administration had a like loss of $3,040,343, while the Southwestern Power Administration ran in the red by $6,629,351.

One of the insidious practices of federal power promotion is the dishonest tactic used in securing the first congressional approval of practically all contemplated projects. Instead of presenting a true picture to Congress and asking for the full amount of federal funds required for their completion, some relatively small amount is requested and once the "investment of the people" has been made, repeated appropriations are demanded to prevent the loss of that investment.

In a study completed in July, 1956, Edison Electric Institute listed 13 projects with power features being built or completed by the Army Engineers and the Bureau of Reclamation, citing the first and latest estimates of federal funds required. Where the first cost of the 13 projects totaled $471.6 million, the latest available estimate of cost was $1,317,700,000, a jump of $846.1 million or 179.4 per cent. And of the latest cost estimate, $679.1 million or 51.5 per cent was allocated to power. Likewise, in the comprehensive report of the Reclamation Bureau on the Missouri river basin project (Senate Document No. 191, 78th Congress, 2nd Session), the estimated cost of the project was placed at $1,257,464,000, while the Budget Bureau in its audit report states the cost to completion would be $5,527,923,000, an increase of $4,270,277,000 or 339.6 per cent.

The major reason why public power advocates in Congress can get away with this procedure is that the larger part of the required funds come from federal tax collections from 18 states with only 37.6 per cent of the membership of the Senate and 48.5 per cent of the House. According to the "Allocation of the Tax Burden," by the State Chambers of Commerce, the 18 states with no federally owned power projects paid $3,897,722,000 in their 1956 federal tax bills to help build federal power projects in the remaining 30 states, or 55.92 per cent of total federal power outlays during the year, although they received no direct benefits from these developments and contained only 48.28 per cent of the 1950 population of the entire country. These data are presented in Table I, page 304.

Taxes collected from these 18 states for the federal Treasury have made possible the construction of federal power projects, and nonpayment of federal taxes by federal agencies distributing energy from these projects and by preference wholesale customers distributing federally produced power, have further increased

TABLE II

TAX PAYMENTS OF INVESTOR-OWNED ELECTRIC COMPANIES IN MILLIONS OF DOLLARS

Year	*Total*	*Federal*	*State and Local*
1957	$ 1,825	$1,100	$ 725
1956	1,761	1,074	687
1955	1,641	1,015	626
1954	1,442	875	567
1953	1,339	824	515
1952	1,224	753	471
1951	1,150	719	431
1950	948	561	387
1949	794	442	353
1948	712	391	321
Total	$12,836	$7,754	$5,083
	100%	61.2%	38.8%

the tax burdens of the 18 states and of other states with small federal power investments.

THE lenient treatment accorded federally produced power in the United States and the gift of federal funds for the construction of federal power facilities is in sharp contrast with the financing and performance of investor-owned electric utilities. During the past ten years, purchasers of electric energy in this country have paid through their bills rendered by investor-owned electric companies close to $13 billion that, in turn, has been handed over to federal, state, and local tax collectors. These 44 million customers of tax-paying private power companies, as a result, carry an unjust burden for the benefit of customers of tax-free publicly owned electric power producers and distributors. Furthermore, based on the trend of expanding electric use and present rates of taxation, customers of investor-owned electric utilities will be forced to pay an additional $25 billion over the next ten years to help defray the cost of all activities of government.

THESE figures spotlight the advantages enjoyed by the customers of federal and other public power agencies, no part of whose electric bills have been increased by taxes paid by their serving utilities. Federal tax payments by investor-owned electric utilities have expanded more than 2.5-

fold in the past decade and in 1957 were nearly 150 per cent greater than the combined total of all personal and corporate income taxes paid in 1933, the year in which the TVA Act was adopted. The record of tax collections from investor-owned electric utilities in the past ten years is shown in Table II, page 306.

With 1957 operating revenues of the investor-owned electric companies estimated by EEI at $8,047,000,000, it will be seen that 13.67 cents of every dollar collected from customers was handed over to the federal government alone last year. If federally owned and other public power systems had made similar contributions, the federal Treasury would have received another $250 to $275 million and that would have bought quite a few sputniks or intercontinental ballistic missiles.

During the 1948-57 decade, the investor-owned electric utilities of the country spent $25,843,000,000 in the expansion of facilities with which to serve the public, and of which $18,618,000,000 was obtained either directly through the sale of securities either to individual investors or through such institutions as life and fire insurance companies, pension funds, fraternal orders, and similar aggregations of investment capital. The balance of $7,225,000,000 or 28 per cent was created internally through depreciation reserves, surplus accruals, and other withholdings of revenues, or through short-term borrowings from banks. During the same years, federal power projects were obtaining their expansion or construction capital from the federal Treasury, and since the federal government has no money of its own, that means from federal taxpayers. Sales of securities by investor-owned electric utilities during the past decade are shown in Table III, below.

One of the major contentions of federal power enthusiasts is that investor-owned electric utilities are unable to engage the private funds necessary to finance the huge expansion of electric facilities to match the growth potentialities of this country and that federal investment of funds of the taxpayers in public power projects is necessary to insure adequate power supplies.

Yet, as noted in Table III and comments thereon, it develops that investor-owned electric companies of the country,

TABLE III

INVESTOR-OWNED ELECTRIC UTILITY FINANCING
IN THOUSANDS OF DOLLARS

Year	*Total*	*Debt*	*Preferred*	*Common*
1957	$ 2,550,000	$ 2,000,000	$ 100,000	$ 450,000
1956	1,456,511	950,000	248,201	258,310
1955	1,496,837	926,887	211,918	358,032
1954	2,273,112	1,485,572	428,994	358,546
1953	2,365,585	1,605,000	223,529	537,056
1952	1,754,943	1,117,320	201,315	436,308
1951	1,531,371	1,003,675	182,083	345,613
1950	1,810,469	1,118,565	321,307	370,597
1949	1,894,647	1,158,758	216,794	519,095
1948	1,484,320	1,125,203	166,051	193,066
Total	$18,617,795	$12,490,980	$2,300,192	$3,826,623
	100%	66.2%	12.4%	21.4%

acting on the basis of their own judgment and not under governmental compulsion and with no political irons in the fire, have been able to obtain from private investors and their institutions an average of more than $1.8 billion a year of expansion capital over the past decade and to generate an average of more than $720 million a year internally, while, at the same time, contributing an average of nearly $1,284,000,000 a year for the support of government and, in part, to enable tax-free federal power projects to be built or expanded.

IF we need sputniks and intercontinental ballistic missiles and more electric generating capacity—and apparently we need plenty of all—why not turn over the expansion of electric facilities to tax-paying private enterprise, where it belongs? Not only will our tax bills be lower, but we shall receive an honest accounting of the way in which our tax money is spent.

We Need More Peanuts, Pygmies, and Beaver Dams

"MANY *people, no doubt, think that the Hell's Canyon controversy has ended. This controversy, it will be remembered, was over whether the federal government should construct a high dam on the Snake river, using the money of all the people for the purpose, or whether the job should be accomplished through a three-dam project proposed by a self-supporting, local tax-paying utility company.*

"After exhaustive hearings, the Federal Power Commission approved the three-dam project, pointing out that it would produce almost as much power as the federal high dam and at a much lower cost. This FPC decision was upheld in the courts, including the Supreme Court. A bill to authorize the federal dam died in Congress. And the first of the three dams is now well along toward completion.

"However, this hasn't deterred the socialistic element. It is still out to take over Hell's Canyon by hook or crook. And one of its weapons is ridicule.

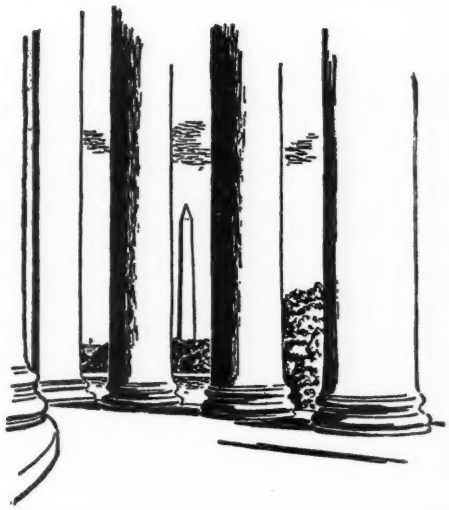
"A public power association has termed the dam now under construction—named Brownlee—as 'peanuts.' And a U. S. Senator has applied the terms 'beaver dams' and 'pygmy dams' to the whole project.

"The facts have been briefly set down by the Albany, Oregon, DEMOCRAT-HERALD. *Brownlee dam will be 395 feet high, 3,120 feet long, and 1,720 feet through at the base. It will be the second highest rock-fill dam in the world and one of the 15 highest in this country. It will create a 14.3 million-acre lake with an area of 22.47 square miles, extending 57½ miles upstream. It is a multipurpose dam, designed to control floods as well as to produce power, and will cost well over $60 million. The cost of the whole three-dam project is estimated at $154 million, and it will pay total taxes of about $10 million a year.*

"The country could sure use more of these private enterprise 'peanuts,' 'pygmies,' and 'beaver dams,' instead of tax-boosting political playthings."

—EDITORIAL STATEMENT,
Industrial News Review,

Washington and the Utilities



Showdown on Memphis

NATURAL gas pipeline companies are looking forward to the U. S. Supreme Court's forthcoming decision in the controversial Memphis case—for obvious reasons. This is the decision which requires pipeline companies to gain consent of wholesale customers before being allowed to file for increased rates under contract terms with the Federal Power Commission under § 4 of the Natural Gas Act. But there is the danger of expecting too much from the simple fact that the court has decided to review the appeal from the Memphis ruling instead of kicking it out of court once and for all and without more ado.

The court could have taken such peremptory action, and because it did not do so, there is a tendency to hope that the highest court has already gotten some ideas about reversing or modifying the lower court—especially in view of the promise to render a written opinion. Reversal or modification may indeed be the result. But it would be a foolish pipeline operator to gamble too much on such an assumption. A more cautious reaction would be that the court's consent to review means that it has been impressed with arguments showing the need for an immediate clarification of the procedural sections of the Natural Gas Act.

Under the Memphis ruling, the § 4 provision for filing rate increases under bond has been rendered virtually impractical in most cases. And the alternative of using § 5 (a provision obviously designed for rate reductions rather than rate increases) seems to be equally unsatisfactory, judging from the standpoint of effective operation of the FPC in handling its case load. It could be that this procedural snafu, rather than the merits of the pipeline company arguments on appeal for rate case relief, will receive most of the court's attention.

THE FPC and the Justice Department, in their petitions for review, both stressed the point that the Memphis decision in effect requires the FPC to abandon procedures used for nineteen years and imposes upon the commission regulatory burdens it is not now competent to handle.

Neither party left any doubt that if the

Memphis ruling is the proper interpretation of the act, corrective legislation will be needed immediately to prevent financial chaos in the gas industry. The Justice Department already has asked the court for an early date for oral arguments and a final ruling by the end of April is not inconceivable. This would leave time at this session of Congress for the enactment of any legislation that the court's decision might render necessary. But such action would have to be taken promptly and with unusual dispatch, compared with the normal pace of congressional deliberations on regulatory amendments.

Regulatory Commission Probe

EARLIER this month the House Subcommittee on Regulatory Oversight concluded the first round of hearings on operations and practices of six federal regulatory agencies—plus a special ordeal for members of the FCC, notably Chairman Doerfer. On its general investigation of regulatory boards, lead-off witnesses were the chairmen of the Civil Aeronautics Board, Interstate Commerce Commission, Federal Communications Commission, Federal Power Commission, Federal Trade Commission, and Securities and Exchange Commission. This was a switch from original plans to conduct the probe on an agency-by-agency basis, beginning with the FCC. But charges of undue industrial influence by regulated industries and favors to individual commissioners were later aired and much friction developed within the subcommittee.

The subject of the first week of hearings dealt with the degree of independence enjoyed by the commission from White House and Budget Bureau pressure. All six chairmen denied knowing of any pressure exerted from this quarter. There were recommendations from these agencies about reforming procedures. With reference to the FPC, Chairman Kuykendall said: "There has been no direction or coercion from the White House on any case before us."

However, the FPC chairman did recommend several changes in the law designed to give the FPC more freedom in its operations, such as the right to submit its own requests for appropriations, independent of those requested by the Budget Bureau. He also suggested that the FPC be permitted to appeal cases to the U. S. Supreme Court without obtaining the approval of the Justice Department. He indicated that several appeals have had to be dropped because the Justice Department declined to act.

CHAIRMAN Kuykendall also made use of the inquiry to renew the FPC's support for legislation easing federal controls over independent producers of natural gas. He listed FPC jurisdiction over producers as one of the present "inadequacies" in the law. He indicated that a majority of the commission approved the Harris-O'Hara Bill, which would specifically bar the FPC from considering production costs in determining a "reasonable" market price for natural gas. Kuykendall said Commissioner Connole concurs generally in the purposes of the bill, but thinks the FPC should be allowed to consider cost and revenue requirements where necessary.

Despite a flurry of rumors, there was no indication of any firm or effective compromise between supporters and opponents of the Harris-O'Hara gas bill to ease federal controls over producers of natural gas. There had been some gossip that supporters of the bill might have agreed to go easy on Eisenhower appointees to regulatory commissions, now under in-

vestigation by the special House subcommittee, in return for Republican votes for the bill. Such speculation, however, was entirely unrealistic.

In any event, the subsequent political explosion in Texas, over the local Republican efforts to raise funds on the strength of support for the gas bill, is now regarded as giving the Harris-O'Hara measure the final setback as far as this session is concerned.

There is no reason to believe that the House subcommittee will change its tactics with respect to future regulatory commission witnesses. Furthermore, such a "deal" would seem to be working the wrong side of the street. There is more opposition to the natural gas producer bill, quantitatively speaking, coming from Democrats, rather than from Republicans. There was a much better chance for supporters of the measure to pick up sufficient votes to pass the bill through an agreement with Democratic Representatives in Congress of coal-producing areas. This was illustrated earlier when Representative Harris (Democrat, Arkansas) virtually invited a compromise with coal interests.

AFTER the blowup which resulted in the dismissal of subcommittee investigating counsel, Bernard Schwartz, there was some doubt whether the regulatory investigation could be put back on the track. So much political and internal friction was generated over charges involving Schwartz and his chairman, who resigned, Representative Moulder (Democrat, Missouri), that further progress of the probe is confused. Representative Moulder claimed that references to his own teenage daughter being put on his own office payroll from 1952 to 1955 while attending high school in Missouri was simply an attempt to "smear" him personally.

Schwartz got in trouble with some of his congressional bosses because of his expense vouchers, which he insisted were in proper order. Schwartz also irritated committee members by leaking a confidential memorandum to sections of the press without authority to release such documents.

Even prior to the blowup some subcommittee members objected to the way Schwartz was handling the investigation. The controversial subcommittee counsel bowed out of the picture amid a volley of charges that he was being gagged because of evidence he had obtained of improper influence on regulatory authorities by high administration personalities and others. Just what there was to such sensational claims may never be known, in the light of the general disposition on the part of the subcommittee to distrust Mr. Schwartz, especially for turning over files to Senator Morse (Democrat, Oregon).

The Gore Bill Again

THE first act in a Democratic drive for more federally owned atomic power plants was slated to begin when statutory hearings on the state of the atomic energy industry opened in mid-February. There is no sign that AEC Chairman Strauss has backed away from his position that civilian reactor development should be left to private industry. But his critics in Congress are expected to make much of the AEC's own semiannual report, recently released, in support of their view that the federal government should play a much more active part in civilian atomic development. The Gore Bill, calling for $400 million for atomic plant construction, was introduced early in this session of Congress.

The AEC's report admits that participation by private industry in the reactor program has been reduced. "A number of reactors now seem unlikely to be

built as originally announced," the report stated. It blamed "current economic trends" as a major factor in the lagging enthusiasm of private industry for the reactor program. However, the AEC insisted that "the hard core of the atomic energy business is already established and growth is steady." Nevertheless, with Congress prepared to ignore the President's budget recommendations concerning numerous federal activities, the Gore Bill may attract more support than it did two years ago.

Looking at the other side, the U. S. holds indisputable leadership over the nations of the world in nuclear power development, Elmer L. Lindseth, president of Cleveland Electric Illuminating Company, declared in a statement early this month. "The real strength of our program does not lie in the number of electric kilowatts we can produce," he said. "America will stay ahead in atomic power basically through intensive research and development. And in this field the independent power companies are embarked on an all-out program." As evidence of leadership, Mr. Lindseth reported that the total number of U. S. reactors for all purposes completed, under construction, or in the planning stage at the end of 1957 was 237.

Niagara Moves Ahead

THE Niagara power project was finally turned over to the New York State Power Authority for an actual start early this month. The authority, after much argument over construction details, agreed to accept the license issued by the FPC. Temporary financing of this power plant system, which bears the ostensible total price tag of $625 million, was obtained in the amount of $100 million. Thus, the physical start has been delayed, in all but purely preliminary activities, for nearly seven years.

The FPC order required the Power Authority to construct a "cut and cover" conduit over the entire 4-mile length of the waterway between the intake works and the hydroelectric project on the Niagara river, rather than leave about one-third of it as an open canal, as the authority had proposed.

Following the 1950 treaty with Canada, a proposal for joint construction by five New York utility companies was approved by the House of Representatives but blocked by the government power bloc in a Senate committee when it was obvious that the Senate would likewise have voted approval at that time. If that bill had become law, Niagara power would be flowing through transmission lines in New York state today instead of three years from now as promised.

When the private company bill was blocked, the government power group adopted an apparent attitude of government-power-or-nothing, in an effort to dictate power distribution policy to New York state. This stalemate continued for three years until a combination of a rock slide, destroying an existing plant at Niagara, and the end of litigation between the state and federal government removed the last excuse for inaction. Even then, bickering with local authorities over construction tied up the actual beginning of construction for months.

Trinity Dam Hearings

JOINT federal-company development of the Trinity river multipurpose power project in California was again urged last month in hearings before a House Interior Affairs subcommittee. Under the proposed "partnership" agreement, which has the

backing of the Interior Department, the power features of the project would be financed by Pacific Gas and Electric Company. The proposal has run into opposition lately, due partly to political considerations and partly to a critical report of the Comptroller General in connection with Central Valley contracts with PG&E. Committee Chairman Engle (Democrat, California), an avowed opponent of the project and a candidate for the California senatorial nomination in November, has used the report as a basis for complaints that PG&E is charging "excessive rates" for Central Valley power it develops.

The PG&E offered to submit to an investigation of its rates and to renegotiate its proposed contract for Trinity power. The company also agreed to have the FPC look into rates charged by the company for distribution of Central Valley power. It was also noted, during the hearings, that the contracts alleged to give PG&E the "lion's share" of Central Valley power were all approved by the Interior Department under the Truman administration.

The fate of the administration's Trinity river (California) "partnership" project remained uncertain, as these hearings continued. It now seems clear, however, that political considerations will dictate whether the project's power facilities are to be built by the federal government or by the Pacific Gas and Electric Company. Aligned on the side of federal construction are the government power groups, Senator Kuchel (Republican, California), and California Democratic Congressmen, including Representative Engle, chairman of the House Interior Committee.

On the other side is the administration and Senator Knowland (Republican, California), who will be running for governor of California in November.

Bills in Congress

THE Senate has approved S Res 148, designed to give Congress a greater voice in planning for federal water resources projects. The resolution asks such agencies as the U. S. Bureau of Reclamation and the Army Corps of Engineers to submit more detailed advance plans on suggested projects.

Representative Byrd (Democrat, West Virginia) introduced a bill (HR 9816) to transfer natural gas from the free list to the dutiable import list under the Tariff Act of 1930. The measure, apparently sought by the coal industry, would impose a tax of five cents per thousand cubic feet on imported gas.

States permitting reimbursement to utilities for the cost of relocating facilities under the Federal-Aid Highway Act could use federal funds for only 50 per cent of the cost instead of the present 90 per cent. This amendment to the act (S 3150) was introduced by Senator Case (Republican, South Dakota). The amendment applies only to those states having reimbursement laws.

Senator Neuberger (Democrat, Oregon), along with other Pacific Northwest Democratic Senators, introduced a bill (S 3114) to establish a Columbia River Development Corporation with authority to issue revenue bonds. The corporation would take over the functions of the BPA. The measure was introduced at the request of the Northwest Public Power Association.

Senator Langer (Republican, North Dakota) introduced two bills (S 3073 and S 3074) to prohibit public utility advertising expense to be treated as an operating expense, and to prohibit deductions of such expenses from gross income for tax purposes.

Telephone and Telegraph

CWA Seeks Rate-making Rôle

A NOVEL approach to labor-management relations in the telephone industry has been suggested by Joseph A. Beirne, president of the CIO-AFL Communications Workers of America. Heart of the union's proposal would be the appointment of a board of "eminent Americans" to help the union formulate its new wage contract demands. Beirne has requested Secretary of Labor Mitchell to appoint such a board.

The union's 57-member policy committee has also decided to concern itself in the future with telephone company rates. Beirne said the CWA would work with rate-making bodies at the state level to show what a union wage increase would add to company expenses.

"In this way," Beirne said, "we can protect the public interest and protect our own interests, while co-operating with the efforts of management to earn a fair rate of return on investment in the business. At the same time we can prevent any excessive claims for rate increases based on proposed wage rises."

The policy committee, at its recent meeting, was briefed on trends in the public utility field by Joseph R. Rose, chairman of the public utilities department of the University of Pennsylvania's Wharton School of Finance and Commerce. Rose declared that "public interest requires that a natural monopoly such as a telephone company be permitted to be a monopoly, but a regulated one," adding that the telephone industry "should be permitted a fair rate of return." But Rose said regulatory commissions often take for granted matters which are not demonstrable by figures submitted in rate increase applications. One example of this, he said, is "the acceptance by commissions at face value of statements by telephone companies that the unit cost of rendering telephone service increases with the number of units in operation in any given area."

Rose said he favored the "appointment" of public utility commissioners and said that unless the commissions are adequately supplied with technical staffs, "telephone companies will always out-expert and out-opinion" those appearing in opposition to their proposals for increases. A union spokesman indicated that from now on the CWA will take a greater interest in appointments and elections to federal and state rate-making groups.

OTHER speakers at the union's recent four-day bargaining policy committee meeting included Leon Keyserling, one-time chairman of former President Truman's Economic Advisory Council,

and Martin E. Segal, a consultant to labor and industry on health, welfare, and pension programs.

Keyserling called the Eisenhower administration's economic thinking "completely outmoded and old-fashioned." His remedy for the current economic recession is simply higher wages. "It is the job of consumers not only to seek and obtain higher real incomes now," Keyserling said, "but to crusade for enlightened public understanding of the fact that only through an expanding economy can the public at large obtain the benefits and the potential good that exist in the American system."

SEGAL told the union's committee that comprehensive health, welfare, and pension benefits are absolutely essential if telephone workers are to have "the necessary protection from the frequently crushing burdens and bills which come with sickness, accidents, hospitalization, old age, and death. In ordinary times these benefits are essential," Segal said. "But today, more than ever before, employees and their families must have such protection because of the urgent need to maintain the health, productivity, and purchasing power of the American people. The better life in a democratic society must have specific expression.

"The increased security, health, and happiness which can come from comprehensive welfare and pension programs negotiated in collective bargaining is one practical demonstration of the fruits of our form of government."

The bargaining committee listed increased wages and longer vacations as the primary goals in negotiations with management this year. "We will ask first for an equitable and substantial general wage increase," Beirne said, "and second for added vacation time that will mean an additional 15 or 20 million man-hours when spread across the entire communications industry. Specifically, we will ask for three weeks after ten years of service, and four weeks after fifteen years of service."

As goals for future negotiations, Beirne said the union would seek a company-financed health insurance program.

New England Rate Cases

A RATE increase amounting to $11,873,000 annually was granted late last month to the New England Telephone & Telegraph Company by the Massachusetts Department of Public Utilities. The company had asked for an increase of $18.6 million. The allowed increase will produce a net annual income of $5,365,000 to the company. The rest will go for federal and state taxes.

The department said the increase will add from 13 to 44 cents a month to the bills of residential customers and from 38 to 88 cents a month for some classes of service. Increases in costs of operation, including a wage increase of $3.8 million in 1957, depressed the company's earnings below a fair rate of return on investment, which the department set at 6.45 per cent.

Vermont's public service commission formally suspended a $1.5 million annual rate increase sought by the same company. Described as a routine action in a rate case of this type, the commission's action meant that the company could not put the new schedule of rates into effect as proposed on February 10th.

Under Vermont law, the utility may put the increase into effect under bond at the end of six months if the case is still in process. The bond is to guarantee refunds to customers in event all or part of the increase is subsequently denied.

Share Owner Interviews

WESTERN UNION'S policy of seeking personal interviews with its share owners has paid off for the company, according to Western Union President Walter P. Marshall. Marshall said that the company's practice of calling personally on its share owners for at-home chats about the company's progress and future prospects attracted as many questions and favorable comments in 1957 as the important subject of dividends and earnings.

Western Union representatives made special reports to headquarters on a cross section of 2,418 share owners called on during the past year. This group of share owners offered 3,507 comments, suggestions, and questions on such topics as Western Union as an investment, the annual report, the interview program, dividends and earnings, management, financial and economic conditions, private wire and facsimile service, development and research, and employee relations.

Western Union, a pioneer in the field of personal calls on share owners, has made nearly 50,000 such calls during the past eighteen years. During that time, 98 per cent of all share owners approved the idea. Although the program requires time and effort, Marshall said it has built invaluable good will for the company. "Our experience has shown that when you give share owners complete, up-to-date information about their company they respond with a high degree of interest and co-operation," he said.

AT the end of 1957 there were 33,541 Western Union share owners, an increase of 14,129, or 73 per cent, in the past three years. This is believed to be a record percentage increase for any major corporation in a three-year period. The sharp increase in share owners was aided by a 4-for-1 stock split in 1955, together with progressive improvements in revenues and dividends.

Consultant's Rôle Challenged

SOUTHERN BELL TELEPHONE & TELEGRAPH COMPANY has gone to court to challenge the Louisiana Public Service Commission's use of a utility consultant in a pending rate case. The company's suit questions the need of the consultant and the reasonableness of his fee which, under Louisiana law, the company must pay.

The consultant in question was a key witness for the state commission about a year ago when Southern Bell was ordered to refund $3,940,000 to Louisiana phone users in a 20 per cent slash of long-distance charges. On December 2nd, when the commission opened hearings on Southern Bell's new request for a $7 million emergency rate boost, the consultant was again brought into rate proceedings.

Protests from the company were rejected by the commission last December when company attorneys argued that the consultant had been retained by the commission "at what the company understands to be an excessive and unreasonable fee." The company contends that, although the law requires it to pay the consultant's fee, the company may act to test the reasonableness and legality of the bill submitted by the consultant.

Should the court uphold the company's position, Southern Bell would be excused from paying for the consultant's services which, according to the company, amounted to $100 a day for eighteen days in December.

Financial News and Comment

By OWEN ELY

Fischer Black's Annual Review and Forecast

THE recent address of Fischer Black, publisher and editor of *Electrical World,* to the New York Society of Security Analysts on the outlook for the electric utilities may be summarized as follows:

Will the electric utilities continue to beat the "wage inflation spiral" by continued mechanization? In other words, can the power and light industry continue to offset higher weekly wages by increased output per worker as it has been doing in the postwar period? He thinks managements are resourceful enough to find new ways to mechanize and to reduce labor-hours per unit of output. For example, this year the industry is adopting new methods of testing meters, making increased use of computers in office accounting, adding new construction machinery, etc.

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The danger lies more in the construction field, where inflationary wage increases cannot so easily be offset by efficiency. Higher construction costs affect capital charges, taxes, depreciation, etc. In the past, such higher costs have been offset by constantly increasing the size of the units, but Mr. Black thinks that this can no longer be done effectively. Also, there is little to gain in operating economy as new units are added. Thus the utilities are becoming more vulnerable to rising wages in the electrical manufacturing industry, resulting in higher costs for generators and other facilities. (Incidentally, it may be mentioned that a few days earlier, President Kennedy of Oklahoma Gas & Electric, also in an address to the Analysts, reported that his company had been able to build a new generating unit at a cost of only $95 per kilowatt with the use of nonunion labor, and employing special methods which union labor would not have favored.)

WITH regard to fuel costs, Mr. Black stated that we are beginning to run out of cheap hydro power, except in the Northwest. In a few southern states the cost of gas, while still favorable, is rising. By 1965 a shift to coal will be well on the way, he thinks—which will be advantageous because of the relative price stability of coal as compared with gas and oil.

The price of electricity to residential consumers has been declining steadily and this trend is likely to continue. Electric heating and cooling should be a profitable business in the long run. Residential and commercial business account for the major part of the investment outside the power plant and are therefore entitled to receive the major portion of the return. Competition for large industrial business keeps the price of industrial power at a minimum.

Regarding the political problem of public power promotion, he sees only two areas of possible infiltration—through the revenue bond scheme for TVA, and in the Atomic Energy Act. He remarked, "It would appear that the containment policy is working out very well, even better than with Russia."

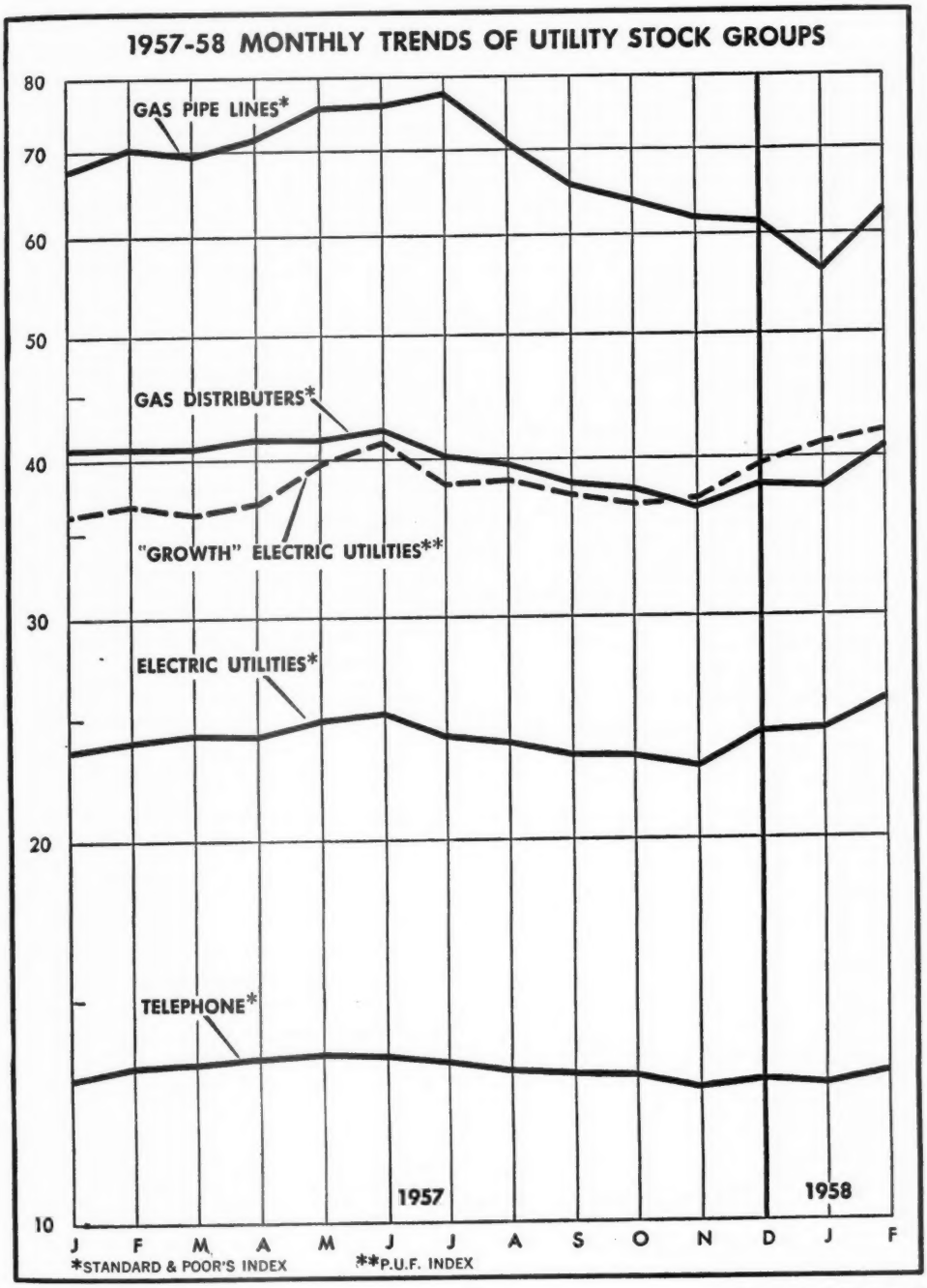
Regarding the effects of the current recession, he pointed out that the utilities have fewer opportunities now of reducing generating costs per kilowatt-hour as industrial load declines, since there are fewer remaining high-cost generating units which could be dropped from operation. However, the demand component in the industrial rate schedule affords considerable protection. In 1938 industrial revenues dropped only 11 per cent while kilowatt-hour industrial sales were down 16 per cent; in 1946 revenues were off 3 per cent and sales 8 per cent; in 1954 there was practically no decline in sales (excluding those to the AEC) while revenues gained 3 per cent.

In connection with the outlook for 1958, construction expenditures do not reflect the recession and more generating capacity will be added than in any previous year. However, there will be some slowing down in the growth of kilowatt-hour sales, he thinks—from 6 per cent last year to about 5 per cent for 1958. This assumes at least a moderate business recovery with an average of 139 for the FRB Index. He expects a gain in industrial sales (excluding AEC) of 4 per cent in 1958, compared with a drop of 3 per cent in the industrial index. During a recession more efficient industrial plants are used, and since these employ greater automation and use much more power per unit of production, the utilities benefit. There should also be a continued steady growth in commercial sales in 1958 due to the current favorable trends in soft goods, recreation, air conditioning, etc.

Residential sales were a little disappointing last year, since sales of electric appliances were smaller than anticipated. But the increased interest in electric house heating is the most encouraging prospect for the residential field. The projected increase for 1958 of installations of resistance heaters is 11 per cent over 1957, and over 60 per cent for heat pumps. The constant increase in the summer peak load is making it increasingly necessary to build up the winter heating load.

Mr. Black expects the rate of growth of total electric revenues will be maintained in 1958 at about the same level as in 1957, with an increase of some $520 million or the same amount as in 1957. However, part of this gain will come from a record total of $100 million in rate increases; some $35 million increases were effective in 1957, with a $65 million carry-over.

The electric utilities still have a good measure of control over the distribution of the revenue dollar, with the percentage going into fuel, maintenance and depreciation remaining relatively constant. The percentage taken by salaries and wages continues to decrease, *and the percentage going into taxes is declining for the first time in history.* He predicted that


1957-58 MONTHLY TRENDS OF UTILITY STOCK GROUPS
80
70
60
50
40
30
20
10
GAS PIPE LINES*
GAS DISTRIBUTERS*
"GROWTH" ELECTRIC UTILITIES**
ELECTRIC UTILITIES*
TELEPHONE*
1957
1958
J F M A M J J A S O N D J F
*STANDARD & POOR'S INDEX
**P.U.F. INDEX

the latter decline would continue in 1958. The operating ratio seems likely to remain around 44 per cent so long as growth and mechanization continue. There should be less trouble this year with fuel prices—coal prices came down again in December after having been raised in the early part of the year, while the oil and gas people have had some trouble raising their prices.

There will apparently be less progress in the future in reducing the cost of generating power, because so many efficient plants have been installed since 1951. In future, Mr. Black pointed out, the cost of generation will depend more on the cost of fuel itself and the location of the power plant (affecting the transportation cost of fuel) than on the fuel economy of the machine. Mechanization of coal mines will be an important factor in holding down the price of coal. While gas and oil in certain areas will continue to compete with coal for a long time, they are beginning to price themselves out of the market, and the increased use of coal will be especially evident after 1965. By 1975 oil may supply only 4 per cent of electric generation compared with 6 per cent today, and gas may drop from 18 per cent to 13 per cent. He does not expect nuclear power to increase very much in this period. Hence, the proportion generated by coal is expected to rise from 55 per cent in 1957 to 66-70 per cent in 1975.

IN connection with over-all industry performance predicted by Mr. Black for 1958, the figures shown in the table below were presented.

As to construction programs over the next three years, the West-South-Central region continues to lead with a projected increase of 52 per cent in 1958-60 inclusive, while the Mountain region is second with a 45 per cent estimated increase. For this period companies with the heaviest expansion programs include Idaho Power, Tucson Gas, Electric Light & Power, Missouri Public Service, Washington Water Power, etc. However, in studying these figures it is necessary to make allowance for reduction of purchased power as a factor in increased generating capacity.

WHILE Mr. Black was not very specific, he seems slightly pessimistic about the outlook for return on investment this year. He said:

> It would appear that in 1958, the rate increases and increased income will fall short of providing for the large increase in electric plant. However, we would expect this to be only a temporary situation which will be offset as growth catches up in 1959 and rate increases become fully effective.

Regarding dividends, he remarked that "Utilities have been taking very good care of the common stockholder in spite of unusual demands for capital funds. We keep forecasting a leveling off in the ratio of dividends to common stock equity, but each year it increases again." According to his calculations, common dividends as a percentage of book value have increased from 8 per cent in 1952-53 to 9 per cent

	Actual 1957	*Predicted For 1958*	*Per Cent Increase*
Construction Expenditures ($ Billions)	$4.7	$5.2	11
New Capacity Added (Kilowatt Millions)	9.3	17.5	88
Customers (Millions)	55.2	56.5	2
Revenue ($ Billions)	$9.3	$9.8	5
Kilowatt-hour Sales (Billions)	561	589	5

in 1957, and he expects this ratio to continue in 1958.

WHAT about trends in Washington? Owing to the administration's partnership policy, the private utilities are now holding their own against public power, their percentage of total generating capacity in the past three years remaining around three-quarters. By 1960 the percentage may show a modest gain to 76 per cent. The Trinity river project in California is an interesting "partnership" project. Under a House bill, Pacific Gas and Electric would construct the generating plants and the federal government would build irrigation and flood-control facilities. However, the bill is currently "fouled up" in the House Interior Committee—unfortunately headed by a public power proponent. (See page 335.)

Are Utility Depreciation Reserves Adequate?

IN connection with the discussion of "economic depreciation" before congressional committees referred to elsewhere in this department, it may be of interest to compare the respective trends of the ratios of depreciation reserves to gross plant accounts for class A and B electric utilities, natural gas pipeline companies, and the two largest telephone systems comprising about 90 per cent of that industry. (See table below.)

While conditions today differ considerably from those in 1946, and the decline in depreciation reserves may be largely explained by the bigger proportion of new plant, nevertheless the figures seem to suggest that present reserves may be inadequate to provide for "economic depreciation"—unless the present "built-in" factor of wage inflation in construction costs can be eliminated. There is a partial offset in increased mechanization and plant productivity, but will it prove adequate?

In theory, the federal government is giving some recognition to the problem by allowing accelerated amortization and fast depreciation. But the companies' books do not reflect these compensatory methods, nor do the figures used by regulatory commissions.

U. S. Summer Peak Load Now Equals Winter

THE Edison Electric Institute's year-end report, compiled by its Electric Power Survey Committee, may be summarized as follows:

Year-end capability of the country's electric-generating capability approximated 131 million kilowatts, an increase of 6.7 per cent over 1956; peak load was

DEPRECIATION RESERVE—RATIO TO GROSS PLANT

	A & B Electric Utilities	*Natural Gas Pipeline Cos.*	*Bell Telephone System*	*General Telephone System*
1946	22%	35%	35%	30%
1947	22	28	32	27
1948	22	26	29	23
1949	21	22	28	21
1950	21	19	28	19
1951	20	18	28	18
1952	20	18	27	17
1953	19	18	27	17
1954	19	19	26	19
1955	19	20	25	18
1956	19	20	24	18
Interim 1957	—	—	23	17

107 million, an increase of 4.5 per cent. Based on winter peak loads, the gross margin of capability over peak load increased to 22.2 per cent in 1957, compared with 19.7 per cent in 1956 and 18.6 per cent in 1955. However, at the time of the summer peak load, capability was somewhat lower (127 million kilowatts) so that on this basis the gross margin was only 19.3 per cent compared with 22.7 per cent in 1956 and about the same in 1955. The lower reserve capacity in summer may have been due to the practice of taking out some units for maintenance or repair.

THE relation of summer to winter peaks (expressed as a percentage of the peak load for the following December) is naturally highest in the southern states. Thus in Region V (South Central states) the summer peak last year was 32 per cent in excess of the winter load, while in the Pacific Northwest the winter load exceeded the summer by 14 per cent. With the addition of new summer air-conditioning facilities, the proportion of the U. S. summer peak to the winter has risen from 93 per cent in 1955 to 96 per cent in 1956 and 100 per cent last year.

THE annual load factor (based on maximum annual peak loads) continued to increase, averaging 66.6 per cent in 1957 compared with 65.1 in 1956 and 62.1 in 1955. The North East, East Central, and Northwestern regions made the

JANUARY UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	*Amount (Mill.)*	*Description*	*Price To Public*	*Underwriting Spread*	*Offering Yield*	*Aver. Yield For Securities of Similar Quality*	*Moody Rating*	*Success Of Offering*
		Bonds and Debentures						
1/8	$14.0	Columbus & S.O.E. 1st 4¼s 1988	101.00	.79C	4.07%	4.43%	A	a
1/9	30.0	Conn. L. & P. 1st 3⅞s 1988	99.75	.70N	3.89	3.73	Aaa	a
1/9	20.0	Wash. Wtr. Pwr. 1st 4⅛s 1988	100.43	.75N	4.10	4.43	A	a
1/9	10.0	Wash. Wtr. Pwr. Deb. s.f. 4¼s 1983	100.75	1.10N	4.45	4.74	Baa	a
1/15	50.0	Commonwealth Ed. Deb. s.f. 3⅞s 2008	101.00	.74C	3.83	3.69	Aa	b
1/16	15.0	Pac. P. & L. 1st 4¼s 1988	100.00	.78C	4.25	4.57	Baa	b
1/17	23.0	Alabama Pr. 1st 3⅛s 1988	100.44	.78C	3.85	3.88	A	b
1/21	8.5	West Texas Utils. 1st 3⅞s 1988	101.34	.88C	3.80	3.87	A	c
1/22	4.5	Cambridge Elec. Lt. 1st 3¼% (s.f.) Notes 1988	101.34	.92C	3.80	3.67	Aa	c
1/22	75.0	Pac. G. & E. 1st (s.f.) 3⅛s 1978	101.46	.89C	3.65	3.67	Aa	d
1/23	10.0	Iowa P. & L. 1st (s.f.) 3⅛s 1988	100.46	.74C	3.60	3.67	Aa	c
		Preferred Stocks						
1/14	5.0	Iowa P. & L. 4.80%	100.00	1.90N	4.80	—	—	a
1/16	10.0	Pacific P. & L. 5.64%	103.00	2.79C	5.48	—	—	b
1/23	5.0	Portland Gas & Coke 5.75%	100.00	2.60	5.75	—	—	a
		Common Stock—Offered to Stockholders						*Earns.-Price Ratio*
1/9	.3	Wisconsin Southern Gas	16.00e	N	6.25			8.9
1/24	3.7	Minneapolis Gas	22.25f	.70N	6.52			9.7
1/29	21.8	Northern Natural Gas	47.75g	N	5.86			7.8

a—Reported the issue was well received. b—Reported the issue was fairly well received. c—Reported the issue sold somewhat slowly. d—Reported the issue sold slowly. e—Offered to stockholders of record December 26, 1957, on a 1-for-10 basis. f—Offered to stockholders of record January 23, 1958, on a 1-for-10 basis. g—Offered to stockholders of record January 28, 1958, on a 1-for-10 basis. C—Competitive. N—Negotiated.

Source, Irving Trust Company

best showing in increasing their load factors during 1956-57.

During the five-year period 1953-57 total new generating capacity exceeded 49 million kilowatts, of which 87 per cent was steam and 13 per cent hydro; 71 per cent was added by investor-owned facilities, 21 per cent by federal, and 8 per cent by nonfederal power agencies. New capacity added in 1957 exceeded that added in 1956 by 1.3 million kilowatts, but was less than that added in each of the three years preceding 1956. The 1957 additions were 84 per cent steam and 16 per cent hydro. Classified according to ownership, they were 72 per cent investor-owned, 17 per cent federal, and 11 per cent other public power agencies.

RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

Annual Rev. (Mill.)			2/5/58 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
		Pipelines & Integrated Cos.									
$ 4	O	Ala.-Tenn. Nat. Gas	20	$1.20	6.0%	$1.46Se	—	14%	13.7	82%	40%
158	S	Amer. Nat. Gas	57	2.60	4.6	3.70Se	D20	13	15.4	70	34
50	A	Arkansas Louis. Gas ...	27	1.20	4.4	1.67Se	9	23	16.2	72	56
47	O	Colo. Interstate Gas	46	1.25	2.7	4.38Se	D17	36	10.5	29	35
343	S	Columbia Gas System ...	17	1.00	5.9	1.22Se	D17	7	13.9	82	46
7	O	Commonwealth Gas	5½	(q)	—	**.54De	107	D	10.1	19	76
16	O	Commonwealth N. G.	35	1.80	5.1	2.89Se	6	X	12.1	62	39
11	S	Consol. Gas Util.	15	.90	6.0	1.58Oc	D2	6	9.5	57	59
266	S	Consol. Nat. Gas	43	2.00	4.7	3.39Se	4	4	12.7	59	65
18	O	E. Tenn. Nat. Gas	9	.60	6.7	.85De	2	—	10.6	71	20
186	S	El Paso Nat. Gas	30	1.30	4.3	2.02Ma	10	7	14.9	64	27
44	S	Equitable Gas	30	1.60	5.3	2.13Je	D11	4	14.1	75	36
19	O	Gulf Interstate Gas	11	.50	4.5	**.77De	—	—	14.3	65	18
27	O	Houston N. G.	42	1.50	3.6	2.83Jy	25	8	14.8	53	27
17	O	Kansas-Nebr. Nat. Gas..	35	1.80(r)	5.1	2.48Se	D2	3	14.1	73	30
95	S	Lone Star Gas	35	1.80	5.1	2.38Se	1	5	14.7	76	43
71	S	Miss. River Fuel	30	1.60	5.3	**2.33De	16	8	12.9	69	50
25	S	Montana Dakota Util. ..	25	1.00	4.0	1.48Se	D2	19	16.9	68	32
23	O	Mountain Fuel Supply ..	24	1.20	5.0	1.68Se	2	9	14.3	71 (s)	53
81	S	National Fuel Gas	19	1.10	5.8	1.35Se	D19	8	14.1	81	62
113	S	Northern Nat. Gas	51	2.80	5.5	3.69Se	9	7	13.8	76	34
43	S	Oklahoma Nat. Gas	27	1.50	5.6	1.85N	D7	6	14.6	81	34
113	S	Panhandle East. P. L. ...	42	1.80	4.3	**2.75De	10	16	15.3	65	37
13	O	Pennsylvania Gas	20	1.20	6.0	**2.26De	40	D	8.8	53	64
166	S	Peoples G. L. & Coke ...	40	2.00	5.0	2.81Se	D7	7	14.2	71	42
80	S	Southern Nat. Gas	36	2.00	5.6	2.16Se	D20	4	16.7	93	46
34	O	Southern Union Gas	26	1.12	4.3	**1.52De	D10	9	17.1	74	35
268	O	Tenn. Gas Trans.	31	1.40	4.5	2.00N	NC	18	15.5	70	20
175	O	Texas East. Trans.	26	1.40	5.4	2.28Se	8	3	11.4	61	18
71	O	Texas Gas Trans.	21	1.00(j)	4.8	2.16Se	D2	4	9.7	46	27
88	O	Transcont. Gas P. L. ..	18	1.00(u)	5.6	1.67Se	30	19	10.8	60	19
300	S	United Gas Corp.	30	1.50	5.0	2.51De	10	12	12.0	60	42
		Averages			5.0%				13.4	66%	
		Retail Distributors									
$ 27	S	Alabama Gas	28	$1.60	5.7%	$2.18Se	D9	13%	12.8	73%	42%
43	O	Atlanta Gas Light	31	1.60	5.2	2.09Se	D24	3	14.8	77	38
5	O	Berkshire Gas	16	1.00	6.3	1.18N	D17	46	13.6	85	35
6	O	Bridgeport Gas	27	1.60	5.9	1.84Se	D29	48***	14.7	87	43
4	O	Brockton-Taunton Gas ..	15	.90	6.0	**1.29De	32	60	11.6	70	40
59	S	Brooklyn Union Gas	36	2.00	5.6	2.92De	4	6	12.3	68	47

Annual Rev. (Mill.)		(Continued)	2/5/58 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
1	O	Cascade Nat. Gas	5½	—	—	Def.De**	—	—	—	—	13
36	O	Central El. & Gas	16	.90	5.6	1.58Je	D8	9	10.1	57	17
12	O	Cent. Indiana Gas	14	.80	5.7	1.03Se	D5	4	13.6	78	65
5	O	Chattanooga Gas	5	.30	6.0	.42N	D12	14	11.9	71	46
64	O	Gas Service	24	1.36	5.7	1.63Se	D48	0	14.7	83	40
7	O	Hartford Gas	40	2.00	5.0	**3.01De	39	5	13.3	66	48
2	O	Haverhill Gas	19	1.32	6.9	1.81N	D4	25	10.5	73	58
18	O	Indiana Gas & Water ...	18	1.00(k)	5.6	1.40De	D9	11	12.9	71	47
46	S	Laclede Gas	15	.80	5.3	1.16Se	D4	5	12.9	69	33
4	O	Michigan Gas Util.	20	1.05	5.3	1.22Se	D21	14	16.4	86	38
5	O	Midsouth Gas	11	Stk(o)	—	.65Ap	4	D	16.9	—	39
42	O	Minneapolis Gas	25	1.45	5.8	2.05Se	D10	14	12.2	71	38
15	O	Miss. Valley Gas	18	1.12	6.2	1.37Se	D29	5	13.1	82	30
4	O	Mobile Gas Service	18	1.00	5.6	1.23Se	—	D	14.6	81	33
7	O	New Haven Gas	31	1.80	5.8	**2.26De	D6	10	13.7	80	66
12	O	New Jersey Nat. Gas	28	1.40(i)	5.0	2.29Se	9	—	12.4	61	33
80	O	No. Illinois Gas	18	.88	4.9	1.36De	4	—	17.4	65	54
8	O	North Penn Gas	9½	.60	6.3	**1.02De	23	7	9.3	59	56
224	S	Pacific Lighting	42	2.00	4.8	2.42De	D15	14	17.4	83	38
19	O	Pioneer Nat. Gas	27	1.40	5.2	**2.02De	15	17	13.4	65	39
13	O	Portland Gas & Coke ...	15	.60	4.0	1.01De	D15	8	14.8	59	36
2	O	Portland Gas Lt.	9	.50	5.6	1.01De	38	—	8.9	50	25
8	A	Providence Gas	9	.56	6.2	**.63De	6	15	14.3	89	60
3	A	Rio Grande Valley Gas .	3	.15	5.0	**.28De	7	9	10.7	54	58
5	O	So. Atlantic Gas	12	.80	6.7	**1.05De	17	2	11.4	76	36
11	O	So. Jersey Gas	28	1.50	5.4	2.20N	4	28	12.7	68	55
26	S	United Gas Impr.	38	2.00	5.3	2.47De	1	1	15.4	81	64
48	S	Wash. Gas Light	38	2.00	5.3	2.77De	D9	4	13.7	72	43
8	O	Wash. Nat. Gas	13	(1)	—	.38Je	D3	X	—	—	41
7	O	Western Ky. Gas	11	.60	5.5	.72Je	D37	20	15.3	83	38
		Averages			5.6%				13.3	73%	

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER STOCKS

Annual Rev. (Mill.)			2/5/58 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
		Communications Companies									
		Bell System									
$5,825	S	Amer. T. & T. (Cons.) ..	172	$9.00	5.2%	*$13.11N	D1%	2%	13.1	69%	66%
274	A	Bell Tel. of Canada	43	2.00	4.7	**2.25De	D3	2	19.1	89	64
43	O	Cin. & Sub. Bell Tel. ..	81	4.50	5.6	**5.58De	2	4	14.5	81	100
209	A	Mountain Sts. T. & T. ..	118	6.60	5.6	9.36Au	7	13	12.6	71	73
308	A	New England T. & T. ..	134	8.00	6.0	8.11De	D10	4	16.5	99	64
792	S	Pacific T. & T.	123	7.00	5.7	7.71N	D7	4	16.0	91	64
108	O	So. New Eng. Tel.	36	2.00	5.6	1.90De	D13	—	18.9	105	64
		Averages			5.5%				15.8	86%	
		Independents									
5	O	Anglo-Canadian Tel.	29	$1.20	4.1%	$3.25Se	6%	54%	8.9	37%	44%
37	O	British Col. Tel.	41	2.00	4.9	2.59Se	D22	12	15.8	77	38
3	O	Calif. Inter. Tel.	12	.70	5.8	1.08Se	24	—	11.1	65	24
15	O	Calif. Water & Tel.	20	1.20	6.0	1.54Jy	NC	10	13.0	78	42
16	O	Central Telephone	20	1.00m	5.0	1.94My	NC	16	10.3	52	29
4	O	Commonwealth Tel.	15	.90	6.0	1.48Je	NC	—	10.1	61	38
4	O	Florida Telephone	21	.90	4.3	1.11My	NC	D	18.9	81	42
281	S	General Telephone	43	2.00	4.7	3.11Oc	NC	32	13.8	64	35

Annual Rev. (Mill.)		(Continued)	2/5/58 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
16	O	Hawaiian Telephone	18	1.00	5.6	*1.19De	D13	19	14.9	84	38
6	O	Inter-Mountain Tel.	15	.80	5.3	**.80De	D16	2	18.8	100	62
21	O	Rochester Tel.	17	1.00	5.6	1.34Se	D19	6	12.7	75	39
3	O	Southeastern Tel.	16	.90	5.6	1.44Ma	4	13	11.1	63	42
9	O	Southwestern St. Tel. ..	21	1.20	5.7	1.69Au	NC	4	12.4	71	40
10	O	Tel. Service of Ohio	110	1.40(w)	1.3	6.95Se	NC	NA	15.8	20	NA
31	O	United Utilities	23	1.25	5.4	**1.63De	D5	5	14.1	77	36
13	O	West Coast Tel.	18	1.00	5.6	1.48Oc	NC	18	12.2	68	41
252	S	Western Union Tel.	18	1.20	6.7	2.03De	D8	15	8.9	59	86
		Averages			5.2%				13.1	67%	
		Transit Companies									
19	O	Baltimore Transit	7	$ .25	3.6%	$**.18De	D86%	X	—	139%	28%
13	O	Cincinnati Transit	4	.30	7.5	**.48De	41	10%	8.3	63	46
8	O	Dallas Transit	6	.35	5.8	**.90De	58	0	6.7	39	54
33	S	Fifth Ave. Coach	22	2.50	11.4	**3.47De	21	4	6.3	73	63
244	S	Greyhound Corp.	16	1.00	6.3	**1.27De	8	—	12.6	79	52
23	O	Los Angeles Trans.	19	1.40	7.4	**1.23De	30	11	15.4	114	92
26	S	Nat. City Lines	23	2.00	8.7	**2.45De	D10	11	9.4	82	94
13	O	Niagara Frontier Trans.	7	.60	8.6	**.28De	D81	—	—	214	82
69	O	Philadelphia Trans.	5	.60	12.0	**1.67De	31	8	3.0	36	38
21	A	Pittsburgh Rys.	6	.50	8.3	.48Se	15	3	12.5	104	90
6	O	Rochester Transit	4	.40	10.0	**.68De	58	18	5.9	59	41
23	O	St. Louis P. S.	8	1.00	12.5	**.69De	1	19	11.6	145	97
15	S	Twin City R. T.	12	1.80	15.0	**1.21De	1	D	9.9	149	48
22	O	United Transit	5	.60	12.0	**.88De	D15	21	5.7	68	48
		Averages			9.2%				8.9	97%	
		Water Companies									
		Holding Companies									
40	S	American Water Works	10	$ .60	6.0%	$ .98Se	D6%	6%	10.2	61%	17%
		Operating Companies									
5	O	Bridgeport Hydraulic ..	30	$1.70(r)	5.7%	**$2.10De	2%	4%	14.3	81%	58%
13	O	Calif. Water Service ...	42	2.40	5.7	3.32De	11	3	12.7	72	32
4	O	Elizabethtown Water ...	39	1.60	4.1	**3.28De	16	31	11.9	49	56
9	S	Hackensack Water	40	2.00	5.0	**2.87De	D20	2	13.9	70	37
8	O	Indianapolis Water	19	1.00	5.3	**1.42De	D12	17	13.4	70	34
5	O	Jamaica Water	34	2.00	5.9	2.88Se+	—	8	11.8	69	25
4	O	New Haven Water	57	3.40	6.0	2.34Je	NC	—	24.4	145	58
2	O	Ohio Water Service	26	1.50(t)	5.8	2.54Se	D7	7	10.2	59	36
8	O	Phila. & Sub. Water ...	32	.50(e)	1.6	3.27Se	25	3	9.8	15	28
2	O	Plainfield Union Water .	57	3.00	5.3	**5.04De	D6	5	11.3	60	39
4	O	San Jose Water	46	2.80(r)	6.1	3.62De	1	9	12.7	77	45
10	O	Scranton-Springbrook ...	18	1.00	5.6	1.48Se	3	8	12.2	68	29
5	O	South. Calif. Water	16	.80	5.0	1.24Se	15	8	12.9	65	34
4	O	W. Va. Water Service ..	22	.68(p)	3.1	1.82De	9	—	12.1	37	17
		Averages			5.0%				13.1	67%	

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. (e)—Also 5 per cent stock dividend December 1, 1957. (i)—Two per cent stock dividend December 10, 1957. (j)—Two per cent stock dividend December 30, 1957. (k)—Two per cent stock dividend December 19, 1957. (l)—Four per cent in stock May 3, 1957. (m)—Ten per cent stock dividend January 2, 1957. (o)—Forty per cent stock dividend June 14, 1957. (p)—Also 1 per cent stock dividend quarterly. (q)—Ten cents in January, 1957. (r)—Includes extras. (s)—Estimate for December 31, 1957. (t)—Also 2 per cent stock dividend September 30, 1957. (u)—Also 10 per cent stock dividend December 30, 1957. (v)—Also 2 per cent stock dividend December 30, 1957. (w)—Also 4 per cent stock dividend December 31, 1957. NC—Not comparable. NA—Not available. D—Deficit 1951. *On average shares. **calendar year 1956 *** 1951 was an abnormally bad year. +—Adjusted to eliminate 24 cents per share of nonrecurring tax savings.

What Others Think

Can Property Records Pay Their Way?

CAN property records pay their way? The answer is yes, but it is not easy. Only when the fullest attention and the most capable know-how are applied to the problem can there be economic justification of property records. On the other hand, there can be no justification for not using property records if economy can be realized from their use.

Companies which can save money with a good property record are those

1. Having an inadequate or no property record.
2. Having too detailed a property record.
3. Having a good property record not fully used.

All the conditions involved must be fully met for a property record to pay its way. These conditions include:

1. A competent organization.
2. Proper tools to work with.
3. Economical forms and methods.
4. Use of automation where applicable.
5. Integration with other internal company functions.
6. Depreciation studies.
7. Insurance valuations.
8. Tax matters.
9. Regulatory matters.

Obviously there is no magic formula or book of rules which would apply uniformly to all utility companies. The size and type of company, the company organization, and local conditions vary greatly. The purpose here is to point out the requisites, the need for and uses of a property record rather than details as to how to prepare and maintain it.

1. *A Competent Organization*

REGARDLESS of the size of the property record or valuation staff, it should include both technical and accounting knowledge. This applies even if the property record work involves only part time of one person. A purely technical staff could be handicapped in maintaining checks and balances with the general books of account. A purely accounting staff could have difficulty in reading blueprints, relating physical quantities purchased to quantities installed, and verifying the accuracy of the inventory in the field.

Construction experience, or at least a knowledge of field conditions, is imperative. Ability to assure proper accounting as between plant additions, retirements,

and maintenance costs is necessary. There is also required a knowledge of and ability to apply company policies with reference to depreciation, insurance valuations, and tax matters.

2. *Proper Tools to Work with*

All the information required for establishing and maintaining the property record should be forwarded in a routine manner from the various company sources involved. This includes work order and retirement order authorizations, contracts, purchase orders, summations of storeroom material quantities and costs and accounts payable vouchers, payroll charges, drawings and layouts, and notices of completion of installation and removal work by construction forces.

3. *Economical Forms and Methods*

The most important step under this heading is a complete detailed review of present forms and methods. Such a review can be made either by outside consultants or by qualified company personnel. The objective should be economy in company operations as a whole rather than in any one department. Property record functions should be co-ordinated with those of other departments furnishing information to or receiving information from the property record. Co-operation of regulatory, tax, and other governmental authorities should be solicited in making reports as simple and economical as possible. In some cases an unnecessarily detailed form of report is continued for many years and the initiative in obtaining permission to simplify it must come from the company. Following a comprehensive review, there should be continuing study as changes occur to permit further economy.

4. *Use of Automation Where Adaptable*

New kinds of equipment for automatic data processing permit economies in the operations of smaller companies where previous equipment was not economically justified. At the other extreme very large companies previously using automatic data processing equipment are achieving further economy by using electronic data processing equipment. Machine summations are generally adaptable for payroll, material, and accounts payable charges. Inventoried quantities of bulk materials such as piping, conduit, and cable may be summarized by machine. Machine operations apply generally in the preparation of data for governmental reports, internal company reports, and depreciation studies. For the final property record in current practice, manually prepared records predominate for inside plant and machine tabulating records are most adaptable for outside plant mass accounts.

5. *Integration with Other Internal Company Functions*

Proper integration eliminates overlapping and duplication and places each function in the area where it can be discharged most efficiently and economically. Excessive clerical work by construction forces is a luxury few can afford and simplicity in accounting for time and material improves accuracy. Unit cost data should be a by-product of property records for use by construction forces to reduce costs and to simplify estimating. Increases in average annual unit costs for representative types of units can be related to increases in labor rates and material prices to determine whether construction efficiency is up or down. Prior to property records the custom was to explain overruns on individual work orders and no unit cost trends were available. Use of

the property record to identify the original cost of retirements appreciably lowers the cost of estimating.

If the meter department or customers' accounting department maintains detailed records of individual meters, the property record may be in simple summary form.

If a central tool depot keeps records of the job location of tools and work equipment, the property record need not record the various moves but merely identify the tools by their central depot designation. Similarly, transportation equipment, laboratory equipment, and any other movable equipment whose movements are controlled and recorded by a responsible department, need be identified in the property record only by the control location.

These cases are merely illustrative of the great many problems that must be considered for proper integration. The question of who puts what information on what form when and where is very important.

6. *Depreciation Studies*

Depreciation has assumed increasingly great importance in utility company operations since the early 1930's when retirement reserve accounting was discontinued.

The impact of depreciation in various ways may be illustrated very simply in the case of a theoretical building for a 10-year period. (See table below.)

This illustration on a unit basis does not indicate the effect of mortality dispersion when group methods of estimating depreciation are used. Likewise, the effect of rapid depreciation for income tax purposes is not shown.

Vintage property records are a must if rapid depreciation is used for income tax purposes. The plea that dated property records are costly is not valid and the slight extra cost is a very worth-while investment. Most utility companies maintain dated records of inside plant. If outside plant records are on machine tabulating cards, an entire year's batch of cards may be gang punched for date in one operation.

Building Values—Original Cost			$10,000
Interest during Construction			600
Original Cost Less Interest during Construction			9,400
Reproduction Cost			22,000
Noninsurables			2,000
Reproduction Cost Less Noninsurables			20,000
Purpose	*Basis*	*Depreciation*	*Value*
Insurance	Reproduction Cost Less Noninsurables 2% Per Year on $20,000	$4,000	$16,000
Real Estate Tax	Reproduction Cost Observed at 15% Condition on $22,000	3,300	18,700
Income Tax	Original Cost Less Interest during Construction— 2½% Per Year on $9,400	2,350	7,050
PSC Rate Base	Original Cost 2½% Per Year on $10,000	2,500	7,500
Books	Original Cost Allocated Portion of Reserve for Entire Account	2,400	7,600
Special	Original Cost Observed at 15% Condition on $10,000 (Giving consideration to obsolescence, inadequacy, efficiency, etc.)	1,500	8,500

A record maintained on machine tabulating cards permits full use of automation in making actuarial studies at minimum cost.

Mortality studies can be made without vintage property records but such studies are not adaptable to the selection of different periods which may reflect changes in service lives due to changes in policy, practice, or kind of equipment.

It is of mutual interest to management and regulatory authorities to arrive at the best possible estimates of depreciation for book and rate base purposes. Good property records provide the tools to do a good job.

7. *Insurance Valuations*

THE property record should lend itself to pricing on the basis of present-day unit costs by a broad and simple application for insurance valuations. The not uncommon practice of bringing original costs forward by the use of cost indices can lead to unjustifiable distortions when applied to individual locations. For example, if the original cost of a location involved considerable overtime work, indexing might result in an excessive insurance valuation.

The cost of insurance may be lowered by appropriate use of property record statistics. The actual mortality data may indicate that premiums are excessive. If so, either the premium must be lowered or a certain amount of self-insurance may be indicated.

Recoveries of claims for damage may be deficient if excessive depreciation is deducted. Here again, mortality data should assist in proper adjustment of claims. A company whose property is well-maintained over a relatively long period should not be penalized by being grouped with companies whose properties have shorter service lives. If, for example, 2 per cent per year is deducted per year on a piece of equipment destroyed by fire after thirty years' service to arrive at a claim equaling only 40 per cent of present-day value, the deduction may be shown to be excessive.

8. *Tax Matters*

THE property record supplies necessary information to local and state tax authorities and permits a check of the reasonableness of assessments as well as a basis for protest of excessive assessments.

Data are available in the property record for supporting the depreciation rates used for federal income tax calculations. Where rapid depreciation is used, the property record segregates the property installed subsequent to the starting date of its application. Claims for residual losses are established for property prematurely retired.

9. *Regulatory Matters*

IN many cases property records are prescribed by regulatory authorities, but whether prescribed or not they are used in regulatory matters, particularly rate cases. In states where the rate base considers only the original cost for rate-making purposes, the property record supplies the required data promptly. Where reproduction cost is considered, the record facilitates cost indexing or repricing.

It is worth repeating here that a property record is of great assistance to a company in substantiating its position in a rate case.

The preparation of reports to regulatory and other governmental authorities is most economical when proper records are available.

Summation

IN the early nineteen thirties, most utility companies had little or nothing in the way of property records because they

were not needed and would be expensive to establish and maintain. Real estate assessments and taxes were not unreasonable. Federal income taxes were not burdensome. There was no Federal Power Commission and no Securities and Exchange Commission.

Depreciation was not of prime importance in general operations.

Since that time real estate, income, and other taxes have become burdensome. Depreciation is now an extremely important factor. Voluminous reports must be prepared for local, state, and federal tax and regulatory authorities. A good property record is now justified as the most economical way to meet present-day requirements.

—E. G. HERY,
Manager, property records department, Consolidated Edison Company of New York, Inc.

Building the Company Image

ALTHOUGH it may not be realized, the public has a mentally framed picture of a utility company. This is true, of course, of all business organizations that have customer-company relations. And this picture—or company image—is either positive or negative, definite or vague, in the eyes of the public.

This company image is created in the minds of a utility's customers from a myriad of associations that directly and indirectly involve the company. It is not much different than the manner in which one individual judges another: through his verbal expression, eye contact, hand shake, poise, cut of his suit, choice of cuff links, shine of his shoes, posture, and so on. Later he judges him on his business abilities, his organizational aptitudes, his ideas, or special talents. At still another time he may judge him on the number of Martinis he consumes on this or that occasion.

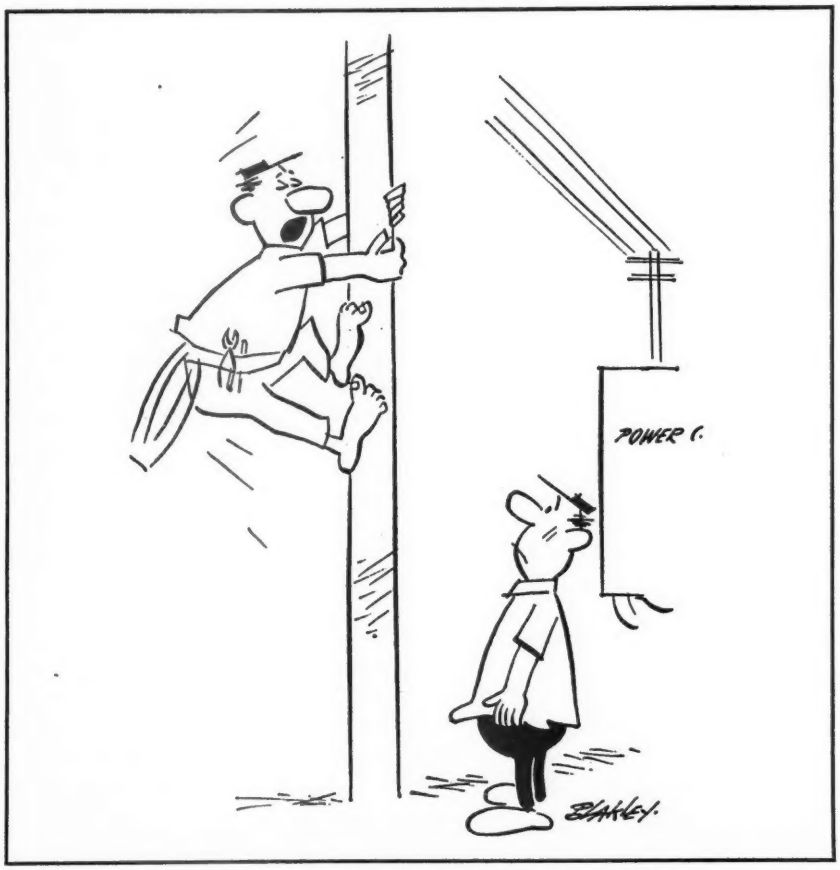
All these logical and emotional (mostly emotional) bits of information concerning this individual are registered in his mind over a period of time. And like Univac, at any given moment they add up to a total figure that is plus or minus. This is the "image" of X individual that he mentally carries upstairs.

A public utility registers on the minds of its customers in the same manner. Although each customer has created his own image of the company from a different set of "input factors," it is highly probable that this individual feeling closely parallels the total feeling—or image—held by the public.

A business firm has a rather definite pattern of action and appearance in its year-in and year-out operations. This pattern stamps out a personality image that is amazingly similar in the eyes of customers served by the company.

IN many industries this concept of image has captured the imagination of today's business executive. Now, more than ever before, he sees "image" as a powerful instrument to help him do a better job. All over America corporations busily are building strong, positive, concise corporate images.

The Chrysler Corporation, for example, four years ago took a severe look at its corporate image. It found this image to be negative in many aspects and that it was creating a resistance to the sales of its five automobile lines. So it launched a bold image-building program, spearheaded by the "Forward Look" theme, that accomplished a remarkable face-lifting job for the whole corporation. Today, the pub-



"CLIMBING HOOKS? NEVER HEARD OF THEM"

lic has a new and different feeling toward Chrysler Corporation—and this is reflected in its increased share of the market.

In recent years the Ford Motor Company has been able to humanize its company image. Since the emergence of Henry Ford II, it has found that one of its greatest psychological assets is the spreading feeling that again there is a strong "true" Ford at the head of the company, who is both a strong executive and a generous person. He has added the element of flesh and blood into the Ford image.

An interesting current case of image building concerns the commonwealth of Puerto Rico. Here we see a very ambitious thing happening: the alteration of the public image of an entire island! Research shows that the total impression of Puerto Rico is unfavorable. Most people think of it and its people as dirty, backward, lazy, and remote, which is an inaccurate picture of the place.

Because of this negative image it is difficult to promote any Puerto Rican enterprise, whether it is industrial development or tourism or rum, or whatever. So the

commonwealth is changing the thinking of people in this country through an advertising and public relations campaign. Once the "brand image" of the island is right, it feels it can make progress in the promotion of its products and industry.

A well-known California bank was concerned about the loan business it lost through people patronizing loan companies instead of the bank. It had the matter researched to find out why a person was willing to go to a loan company and pay much higher rates of interest. In brief, it discovered that people considered borrowing an unpleasant, tension-creating, and rather humiliating experience, and that the sterile, austere character of the bank greatly amplified these tensions and unpleasant feelings. To help correct this negative situation this bank embarked on an overall, long-term image-building plan to create an atmosphere of warmth, friendliness, and helpfulness, that would become associated with its name.

THERE are a multitude of current cases in which companies are engaged in a continuous and long-range program of image building. The image builder's job is both simple and complex. He wants a customer to recognize his strong, simple image—and feel instantly all that the image represents: good, quality products or service; forward-looking business; something to command continual loyalty and good will.

This concept is much broader than "institutional" advertising, which simply means companies talking about what they are doing for themselves. Corporate image development is a company talking about how good the company is for the customer—what it is doing for the customer.

Furthermore, advertising is only one of many factors (although an important one) involved in the creation of a company's personality profile. The service it renders, the appearance of its offices, the attitude of its employees, the rates it charges, the courtesy of its servicemen, the voice at the switchboard, its methods of billing, the design of its letterheads, everything it does and does not do and the manner in which it is done—all these facets and a hundred others form the die that stamps out the company image. Some facets can be controlled; others are beyond control.

But what is important is that any management can build any corporate image it seems desirous to build—given time, talent, and planning. And herein lies great opportunity!

AS a privately owned utility serving a vast number of customers, it is of paramount importance to maintain a favorable position in the eyes of the customers. It is important because of reasons already mentioned. But it is doubly important because of definite negative attitudes that people have concerning utilities in general. These background attitudes exert an unfavorable pull which places the utility in a minus position at the outset.

Take the case of a natural gas utility. Psychological research uncovers the following basic ideas (true or false) people have concerning a gas utility: Gas is not a commodity but a God-given product of nature to which nothing is added through processing or manufacturing—it is simply piped from the ground to the home. Gas is an unseen thing that is burned up—it is intangible "merchandise" taken for granted and paid for with nothing visible received in the exchange. Gas is something essential to one's well-being—therefore it should be in the public domain.

Some of these attitudes would be true

of electric, transit, water, or telephone utilities also. And for utilities generally there is among a sizable segment of the population the feeling that a utility is a monopoly concerned only with making a big profit rather than serving in the public interest; that public ownership would mean cheaper and fairer rates; and that a privately owned utility is stealing natural resources that belong to the people.

WHETHER we like it or not, these are broad attitudes or emotional feelings that customers cling to, as revealed by psychological surveys. Thus, there are two strikes against a utility before it even comes to bat. The point is, there must be a program working to offset these minus attitudes so that the company image moves towards the plus side. The alternative is to live dangerously and do nothing.

The first step in the development of a company image is to realize that image building is an important concept in business today. To be effective in utility operation it must be a fundamental element of management thinking. For every corporate action affects the image.

Secondly, decide what this image should do for the company. Should it pave the way for future rate increases, or gender a public feeling toward it of "friendly efficiency," or build a concept of progressiveness and modernity that will reflect favorably on the type of appliances that use its fuel, or should it develop the idea of good "citizenship in the community"? Or perhaps a combination of things?

Next, find out where the company stands now—what people think of the company. This involves careful research. Statistical surveys that merely count noses will not come up with an accurate picture, for in order to discover what the true image is you must dig deep into emotional feelings.

Psychological, or motivational, research is probably the only research method that can give the answers. This technique is based on "depth" interviews of about two hours' duration with each respondent. Attitudes and ideas are expressed in a free, conversational manner while the interviewer covers certain areas and notes the respondent's remarks verbatim. What is said and what is not said and the manner of saying it permits the research analyst to look beneath the surface and shape a true image of the organization.

WITH this insight into the public's thinking the company is now in a position to define its problem. It has decided what it wants to accomplish in its image-building program, and through psychological research it knows where it stands at the moment and what its strengths and weaknesses are. The company is now ready to work out a hypothetical image of itself.

This new image must do the job or jobs the company has in mind. But it must be one that is within reach—one that leads from strengths, not one that bucks basic emotions that are too deeply rooted to be altered. And it must be a crystal-clear, well-defined personality that is sought, not a complex, panacean image that winds up in the public mind as a vague notion.

Next, create a theme that will be the vehicle of the image-building program. A long-range integrated communications campaign should be planned that employs advertising, public relations, promotion, and publicity.

It is obvious, of course, that no plan can successfully promote any company, service, or product that does not live up to what is said about it. For example, a

transit utility attempting an ambitious face-lifting program designed to promote its service as the fast and comfortable way of commuting in Metrodelphia had better provide fast and comfortable service or it will be wasting its money. When Chrysler Corporation launched its "Forward Look" corporate image-building program through advertising, it had the product to back up what it was saying. You cannot build a new image out of blue sky.

And so planning must go beyond the scope of communications. It must encompass operating procedures, methods of service, employee attitudes, and physical appearance. Required is a total integration of effort. Everything that the public sees about or associates with the company must reflect the personality the company seeks to project. Say, for instance, a company is building the idea that its utility service is courteous and efficient; then its serviceman appears in the customer's home unshaven and in a shoddy uniform. He may be the most courteous and efficient serviceman in the organization, but he won't appear that way to the customer. Or again, the object may be to project an aura of up-to-date progressiveness around the company. But if the customer finds the company lobbies are old-fashioned, cluttered, and dingy, he won't be convinced that the company is the progressive concern it claims to be.

What is needed in the long-range cultivation of company personality is simply for the company to be what it says it is—then tell the public about it in a motivational manner.

It is important that the image-building program be tested periodically, using the initial research survey as a bench mark. In this way the effectiveness of the program can be checked and its strong and weak points re-examined. But remember that in the utility business this is a slow process—slower than the development of a brand image for a specific product.

As previously stated, any management has the opportunity of building any corporate image it seems desirous to build, given time, talent, and planning. And, indeed, it is an opportunity. The advantages are obvious no matter how you look at it: as a volume builder for sales, as a safeguard against encroaching public ownership, as a morale tool for employees or magnet for attracting high caliber personnel, as a buffer against community resentment over rate increases, as a lever for attracting investment money, as an anchor of security for future business.

Most private utilities are keenly aware of the importance of good public relations and have an active PR program in operation. But I know of no utility that has seized this concept of image and is developing it through a program of total integration. The sales department goes its way. The advertising department goes its way. And the public relations department goes its way. There are many acts—but no show! Perhaps what is needed is a bull in management's china shop to rip up outmoded concepts and complacency.

A utility lives close to its customers. As mentioned at the beginning these customers have formed in their minds a certain picture of the company, which is the corporate image. It is there, right now, today. It might be a good idea for a utility to find out what it looks like—in the eyes of its public. And it might be time to send the company to the cleaners.

For in today's dynamic market, there is no place for a faceless entity!

—John S. DuBois,
Assistant advertising manager,
Southern California Gas Company.

Congress Urged to Approve Trinity Joint Development

SPOKESMEN for the Pacific Gas and Electric Company appeared once more before a congressional committee to urge approval of a plan for joint development of the Trinity river project in California. The proposal, which has the support of the Interior Department, has run into formidable opposition in Congress, including that of Representative Engle (Democrat, California). Engle, who is a candidate for the Democratic senatorial nomination in California, is an avowed opponent of the Trinity "partnership" project. As chairman of the House Interior Affairs Committee, which must approve the plan, Engle heads a group of public power proponents who want to authorize an all-federal project.

At committee hearings last month, strong arguments in favor of construction of the project's power features were presented by PG&E Executive Vice President Robert H. Gerdes. Under the private company proposal, the Trinity power plants would be constructed at the expense of the company and operated under a federal license for fifty years, subject to recapture by the United States at the end of that period. The company would make an average annual payment of $4,617,000 to the United States for use of the falling water. This payment amounts to about $5.33 per acre-foot of water which, after it turned the turbines, could be sold again by the Bureau of Reclamation for $2.75 per acre-foot for irrigation.

The proposed arrangement also provides that the company will extend its existing power sale and interchange contract with the United States to coincide with the current Central Valley project repayment period, which terminates in the year 2013. The present contract expires in 1961. This would mean that the government would be assured of support from company plants during that entire period for 450,000 kilowatts of project power. According to Gerdes, this would give project power its greatest value and enable the bureau to sell its maximum commercial capacity on a dependable basis to federal and preference agencies.

THE company would also furnish off-peak energy on an exchange basis to enable the bureau to operate Central Valley project pumps, including those of the proposed San Luis unit, at minimum cost. The agreement would permit the United States to use the company's transmission lines to serve federal and preference agencies at a charge less than the cost of constructing a tax-free government transmission system.

Gerdes stressed the financial benefits to the government and taxpayers to be gained from joint development of the project. At the outset, the government would save $56 million in construction costs—about 25 per cent of the estimated cost of the entire project. The Central Valley project would pick up an additional $165 million in net revenue from falling water and savings in the cost of power operation. Joint development would produce $145 million in new tax revenues, the company argues, including $83 million in federal taxes and $62.6 million in taxes for the support of state, county, and local governments. Gerdes noted that in Trinity county, more than 70 per cent of the land is owned by the federal government and is tax-exempt. Joint development would mean that PG&E's total payments to the county would be nearly $400,000 a year, or more than 40 per cent of the total taxes levied by the county. The company's annual payments in neighboring Shasta county would increase to over $3,170,000—more than one-half of the coun-

"WHAT DOES HE MEAN—HOT WIRE? THIS IS AS COLD AS I-I-I-I-I!"

ty's total tax levy. Gerdes told the committee:

> The company would distribute Trinity power, without discrimination, to more than six million people throughout northern and central California. The power would be sold to the company's customers at rates established by the California Public Utilities Commission.
>
> The rates, financing, and operation of public utilities have been continuously and effectively regulated by the commission since 1914. Under such regulation, company payments for Trinity falling water would be entered on its books as an operating expense, the same as the cost of wages or materials. The company can make no profit on the falling water it purchases. All it is allowed is a fair return on its own investment in facilities used and useful in service to the public. Any benefits from purchase of falling water must be passed on to customers in the form of lower electric rates.

UNDER federal construction and operation, Trinity power would not be available to the general public, said Gerdes, although generated at public expense. It would be sold by the bureau at Central Valley project power rates to some federal establishments and to preference agencies which serve fewer than 7 per cent of the people in northern and central California. "We submit that Congress should not deny the federal government millions of dollars in project revenues and also prevent state and local governments from receiving additional millions in taxes merely to furnish power to a favored few at subsidized and tax-free rates," he stated.

Approval of Trinity joint development would follow the policy, established by Congress more than fifty years ago, of leasing to nonfederal agencies the falling water made available by federal reclamation projects, Gerdes continued. The Reclamation acts of 1906, 1911, and 1939, and the Federal Water Power Act of 1920 as amended in 1935, spell out that policy. He declared:

> None of these acts, and no provision in reclamation law, requires the government to construct power plants merely to serve preferred customers.
>
> All of these acts provide for the lease of power privileges to nonfederal agencies, such as that proposed in the Trinity development. Preference in such leases is given to public bodies.
>
> Under the Federal Water Power Act of 1920, a private agency may receive a federal license to develop power at "any government dam" unless a preference agency comes forward with an offer equally well adapted to conserve the water resources of the region. . . .
>
> Preference customers were given ample opportunity and none advanced any proposal to purchase Trinity falling water. Thus, all the preference requirements of reclamation law have been met.

BY accepting the Secretary of Interior's recommendation for joint development, Congress would follow its long-established policy of leasing power privileges to nonfederal agencies, Gerdes said. He noted that under this policy, at least 26 local power developments were authorized at federal reclamation, navigation, and flood-control dams between 1908 and 1953. They were located in 13 different states.

The local agencies included 14 public bodies, 10 private utilities, and two industrial users. Of these authorized joint developments, 12 were undertaken during Republican administrations and 14 during Democratic administrations.

Electric power produced as a by-product of water projects operated primarily for other purposes has its greatest value when co-ordinated with a regional power system such as that of PG&E, Gerdes said. The company's system interconnects 58 hydro and 14 steam-electric plants owned by the company and the plants of nine other producing agencies. Twenty-three of the company's hydroelectric plants are located within an 85-mile radius of the Trinity project. Within this area, the company has installed more than 800,000 kilowatts. In the same area, PG&E is now building or has under application to the Federal Power Commission seven more plants with a total installed capacity of more than 700,000 kilowatts.

Under joint development programs similar to that proposed on the Trinity river, PG&E has constructed power facilities and pays for the use of falling water. Examples are the Narrows dam built by the Army Corps of Engineers and the Malones dam of the Oakdale and South San Joaquin Irrigation districts on the

Stanislaus river. The revenues obtained by these public agencies from falling water purchased by the company have contributed substantially toward repayment of the cost of their water conservation works, Gerdes said.

CALIFORNIA needs maximum revenues from power to assist irrigation development, Gerdes emphasized. A report of the State Department of Water Resources calls for the ultimate construction of 376 new reservoirs, and hundreds of miles of canals to transport water. The proposed storage capacity is nearly four times that now built or under construction. This program eventually will be required to supply over 40 million acre-feet of water a year for irrigation, at an estimated cost of $12 billion.

Gerdes noted that the federal government already has spent more than $1 billion on water resources development in California. Another $650 million will be required to complete presently authorized federal water projects. "Whenever possible," he said, "additional funds for water development must come from the co-operation of local, public, and private enterprise with the federal and state governments in joint developments such as that here proposed for the Trinity river."

NRECA Meeting Hits REA Loan Plan

THE Eisenhower administration's controversial proposals concerning rural electrification occupied the center of the stage earlier this month at the annual meeting of the National Rural Electric Co-operative Association in Dallas, Texas. There was general agreement at the meeting that if rural co-ops are forced to rely on private financing, as suggested by President Eisenhower, the REA program for all practical purposes will virtually cease to exist.

A call to arms was issued by NRECA General Manager Clyde T. Ellis, who said the rural co-ops face the greatest crisis in the history of rural electrification. Ellis also objected to the President's request for $150 million for new electric loans in fiscal 1959, a figure which he said falls far short of what will be actually needed.

According to Ellis, an NRECA investigation shows that rural co-ops probably could obtain no loans whatever from private sources unless such loans were insured by the federal government. But even with such insurance, which the administration recommends, there would be difficulties.

Ellis said:

. . . To start with, we are "co-ops"—a bad name among monopolists.

Next, we are regarded in the money market as enemies of its principal pet, the cost-plus power trust.

Next, we require a disproportionately large amount of capital investment.

Next, we require 100 per cent construction loans; *i.e.*, we are 100 per cent debt-financed.

Next, we operate in marginal territory.

Next, our territory being in jeopardy by the power company piracy and sell-out campaigns, our distribution co-ops have no assured market.

Next, our distribution co-ops have no assured source of supply.

Next, our generation and transmission co-ops have no assured market.

Next, most of our distribution co-op mortgage notes would be too small for favorable market acceptance. Top bro-

kers tell us they lose money on issues of less than $2 million.

Next, the government never set us up to be able to walk alone at this stage. It required us to pay off our capital loans—something the power companies never do.

And finally, 66 per cent of the rural electric systems have less than 20 per cent equity, and 91 per cent have less than 40 per cent equity. Over the nation as a whole the average equity per system runs only about 13.5 per cent. By comparison, power companies on the average have an equity of several times that amount, plus a public service monopoly status.

So-called government insurance, Ellis said, is usually limited or conditional. There is always the possibility that the loans could go bad and Congress fail to back them up with appropriations. "If you had money to lend," he asked, "at what rate of interest would you be willing to tie it up in a rural electric co-op for thirty-five years?"

Ellis said NRECA studies indicate that co-ops probably could not obtain loan funds under the administration's proposals at less than 5 per cent, plus the 1 per cent service charge, in the long run and under present conditions. An interest rate of 6 per cent would mean that new loans would cost $40,000 a year more per $1 million of loan than at the present 2 per cent.

An interesting point made by Ellis was that under the administration's proposal, the result might lead to more rather than less public power. "Money market experts are telling us that if we are forced into the market our financing will be much less difficult as public power districts rather than as co-ops," he explained. "Then, they point out, we would be units of government; we would have better protection from invasion; we would have the right of eminent domain, the right of condemnation even over power company properties; we could pledge not only revenues but taxes as well, if necessary, as security. Furthermore, the investors' income from our bonds would then be tax-exempt. . . . I would say that if the Wall Street monopolists and the administration really want public power in America they seem to be on the right track with this Hoover Commission proposal to kill REA loans and throw us to the mercy of the same money market barons who control the profit power companies."

As NRECA's program for the year, Ellis urged a redoubling of effort to: (1) obtain adequate loan funds from Congress, perhaps as much as $300 million; (2) block any change in the present status of REA; (3) support legislation to prohibit the cost of antipublic power advertising by privately owned power companies from being considered as an operating expense, and prohibition of the deduction of such costs from gross income for income tax purposes; (4) support a "workable" TVA revenue bond financing bill and an equitable cost allocation bill for multiple-purpose projects; (5) support legislation authorizing the construction of a high federal dam at Hell's Canyon in Idaho; (6) support passage of the omnibus multipurpose projects bill; and (7) back legislation providing for greater participation by the federal government in the domestic atomic energy program.

Ellis also urged the delegates to agree to double their dues to the NRECA, or triple them if necessary, "in order to achieve maximum efficiency in those of your national services which are dues supported—principally legislative, public relations, organization activities, and consumer-member information, including power use."

THE administration's estimates of REA loan needs were sharply challenged by Ellis. He also objected to the practice of referring to loans for rural electrification as "expenditures," since no account is taken of the amounts repaid on principal in fiscal 1957 and the amounts that will be repaid in 1958 and 1959. The request for $150 million in new loan authorizations falls below the official REA annual construction loan survey. This survey estimates that new electric loan needs will amount to $210 million for fiscal 1959, Ellis said. But even this figure is too low, according to Ellis, because it is based on a survey more than six months old and is therefore out of date.

"NRECA's own annual survey is not complete yet," he explained, "but we already know from your own system-by-system statements of your needs that they will be substantially greater than the administration's estimates. NRECA's estimates of the need, compiled from data submitted by you a half-year later than the REA survey, have nearly always exceeded the Budget estimates. Yet ours have always been proved to be conservative, without exception."

THE sentiments expressed by Ellis toward the President's REA proposals were generally echoed by two influential Senators, Cooper of Kentucky and Sparkman of Alabama. Cooper, a Republican, told the delegates he did not believe the co-ops should be required to pay more than 2 per cent for money lent them by the government. He predicted that Congress would refuse to go along with the President's recommendations.

The administration's contention is that REA has completed its assigned task of electrifying rural areas that could not be served by private companies and that, therefore, rural co-ops should be required to pay the same interest rates as private companies. Contradicting these assumptions, Cooper stated:

> The original and continuing purpose of the REA, expressed again and again in the act, is to furnish electric energy to persons in rural areas who are not receiving central station service. . . . Many co-operatives have extended their services to areas at high cost upon the basis of the 2 per cent rate, to fulfill the purposes of the act. Others must extend their service to remote farms and areas at high cost, if the purposes of the act are to be fulfilled. . . .
>
> Co-operatives are now engaged in the construction of generating and transmission facilities, authorized by the act. In my state, the East Kentucky Rural Electric Co-operative Corporation is constructing and must complete generating and transmission facilities if local co-operatives and thousands of farm families are to receive needed electric energy. If interest rates were raised, it would limit, and in many cases undoubtedly prevent, these advances which are being made by local co-operatives.

COOPER said that if the President's requests with regard to REA interest rates were granted, rural co-ops would have to pay rates of at least 3.6 per cent. "When REA's original objectives have been met," he said, "such a proposal will be reasonable."

Senator Sparkman, another principal speaker at the annual meeting, was even more outspoken in opposition to the President's recommendations. He assailed what he called President Eisenhower's "mad infatuation with Wall Street money lenders" and said the President's "mishandling of rural power co-operatives is another example of inept leadership."

The March of Events

Urges Atom Power Halt

THE Southern Coal Producers' Association called upon Congress this month to end the civilian atomic power development program of the Atomic Energy Commission. In an open letter to Representative Carl T. Durham (Democrat, North Carolina), chairman of the congressional Joint Atomic Energy Committee, Association President Joseph S. Moody called the program "wasteful and impractical."

Moody said the AEC's power development program has been (1) a "dismal failure," (2) "completely unnecessary," (3) a dissipation of the nation's scientific and technical man power, and (4) a heavy tax burden on the American people. He said the program fell into the category of those government services called nonessential by President Eisenhower in his demands for increased defense spending.

Key members of the Joint Committee promptly registered their opposition to Mr. Moody's proposal. Representative Chet Holifield (Democrat, California) predicted that coal interests will be "no more successful in stemming the progress toward the development of an economic atomic power than they have been in trying to stop the use of natural gas." He said the development program was justified from both a domestic and foreign policy point of view. He noted the high cost of power from nonatomic sources in foreign countries.

Reactor Owners Responsible

THE English government said recently it would enact legislation holding private owners of nuclear reactors financially responsible for accidental atomic disasters up to $14 million dollars in personal or property damage.

Sir Ian Horobin, Parliamentary Secretary for the Ministry of Power, said "all owners of such reactors will be subject to the same duty as the Atomic Energy Authority of preventing damage to property or personal injury from radioactive contamination."

SEC to Limit Exemption

THE Securities and Exchange Commission recently announced that effective September 30, 1958, small holding companies will no longer be exempt from regulation under the Public Utility Holding Company Act.

Previously, holding companies with an asset value of less than $1 million or a value of less than $1 million prior to December 1, 1946, were exempt from regu-

lation under Rule U-9. The commission scrutinizes such things as financing proposals and intercompany transactions under the Holding Company Act.

The SEC said the exemption for small holding systems was lifted because of doubt whether exemption is justified merely because of size. Also, companies not in existence under the 1946 date, or companies whose assets have grown over $1 million, have been able to claim exemption, the commission said.

Arizona

District Legislation Introduced

BILLS which would place electric power districts, including the Salt River Power District, on the property tax rolls were introduced in the state legislature by Representative Douglas Holsclaw, Pima Republican, and other house members.

One bill would require amending the state Constitution to lift the present tax exemption. Another would remove districts from their present status as "municipalities."

California

Gas Rates Boosted

SOUTHERN CALIFORNIA GAS COMPANY and Southern Counties Gas Company recently received permission from the state public utilities commission to boost their gas rates enough to produce a total of $2,922,800 additional revenue annually. The rate boost goes into effect on March 1st.

Reason for the increase was to offset higher costs of wholesale gas delivered from the San Joaquin valley by Pacific Lighting Gas Supply Company, it was said. The price of wholesale gas went up January 1, 1958.

Southern California Gas Company will receive $1,919,400 from the rate boost. Southern Counties' share is $903,400.

Colorado

Gas Rate Increases Allowed

SIX companies were authorized by the state public utilities commission to increase the annual natural gas bills of some 275,000 Coloradans by $1,559,048, effective February 5th.

Explaining that they had no choice, commission members said they were merely allowing the six firms to pass on to their customers the increases granted three pipeline companies by the Federal Power Commission. These wholesale increases, and the retail boosts, are subject to refund if the FPC subsequently finds they are unjustified.

The largest increase, $1,153,298, was granted by the commission to Public Service Company of Colorado. This firm serves 239,300 customers in the state, almost 185,000 of them in the Denver area. Their monthly gas bill was raised by about 30 cents each.

The other annual raises were announced as follows: Pueblo Gas & Fuel Company, $120,393; Colorado Springs municipal plant, $174,612; Citizens Utilities of La Junta, $43,382; Greeley Gas Company (Weld county), $40,029 (Fremont county), $15,779; Plateau Natural Gas Company, serving Lincoln, Kowa, Douglas, and El Paso counties, $10,920.

Maryland

Rate Increases Delayed

THE state public service commission early this month ordered the Baltimore Gas & Electric Company to delay its proposed rate increases until a public hearing is held April 2nd.

Higher rates calling for 6.5 per cent more for gas and electricity and 10 per cent more for steam heating were requested by the company last month. They were to have gone into effect on February 14th.

The company has said it needs the increased rates to meet higher operating costs and because of the "necessity of attracting large amounts of new capital." The increases would yield $9,951,000 a year.

Minnesota

Telephone Tax Proposal Killed

A PROPOSAL to impose a local tax on telephone and telegraph companies was killed by the ordinances and legislation committee of the Minneapolis city council this month, at least until the 1959 session of the state legislature.

Council President Martens, who sponsored the proposal, said it apparently had little support because of a question as to whether such a tax needed state enabling legislation.

It was estimated that the proposal, which would have put a tax on each mile of telephone and telegraph lines in the city, would have produced $750,000 in additional annual local revenue.

Similar Minneapolis legislation now produces about $420,000 in taxes on electric lines and $475,000 on gas lines.

Natural Gas Rates Increased

AN increase of 5 cents per thousand cubic feet of natural gas in the rates charged by the Minneapolis Gas Company, as had been proposed by the company for 1958, was recently approved by Minneapolis City Research Engineer Nathan Harris.

Under the city's gas franchise ordinance, the engineer is the final rate-setting authority, except as an appeal to the courts may upset his decision.

Nebraska

Tax Plan Would Aid City

THE proposal by Consumers Public Power District to amend the Constitution to provide for a 5 per cent tax on gross revenue from the sale of electricity in incorporated cities and villages would bring an additional $114,893 to the taxing political subdivisions within the corporate limits of the city of Lincoln.

Under the initiative petition proposal Consumers would sponsor with the Omaha Public Power District, the 5 per cent tax money would include the present in lieu of tax payments, which would be established at their 1957 level.

Lincoln received a total of $21,607 in lieu of tax payments in 1957. Lancaster county, within the corporate limits of Lincoln, received $51,338 to be distributed to the Lincoln school district, county, state, and institutional governmental subdivisions.

Under the constitutional proposal, the county's in lieu of tax payments would

be distributed according to the 1957 formula. The difference between the in lieu of tax payments and the total of the 5 per cent tax, however, would be distributed to the five agencies, including the city, on the basis of their respective mill levies to the overall tax picture.

CPPD reported its revenue for a four-month period in the corporate limits of Lincoln, from September through December, 1957, totaled $1,252,273.

File Power Suit Answers

THE Norris Rural Public Power District and the city of Beatrice each have filed answers in district court at Beatrice to the amended petition of the Consumers Public Power District in Consumers' litigation to break the Beatrice-Norris power contract.

In its answer, the city denied the allegations in Consumers' petition that "any material misstatements or misrepresentations were made by any persons at the March 25, 1957, meeting of the city council." The city also denied any restraint of trade is being exercised and said that since the city lawfully owns and operates the electric distribution system in a proprietary capacity and as an authorized monopoly, the mayor and the city council were using the official power vested in them when accepting the Norris contract and such power is not vested in the courts.

The answer filed by the Norris District asked the court to dismiss the Consumers petition and claims that subsequent to March 25, 1957, agents of the Consumers District sought by letter and personal contact with the city council and other prominent persons to cause the council to break the contract between the city of Beatrice and the Norris Rural Public Power District.

Oregon

Fare Hike Opposed

IN an eleventh-hour concession, Portland City Commissioner Ormond R. Bean yielded to 25-cent fares, effective February 9th, to end the threat of a city-wide bus shutdown. His single "aye" gave the needed unanimous vote strength to a deadline city council effort to make peace with the Rose City Transit Company.

In exchange for 5-cent higher base fares, the company would agree to continue operations to the end of its current permit—July 5th—or longer if wanted.

Texas

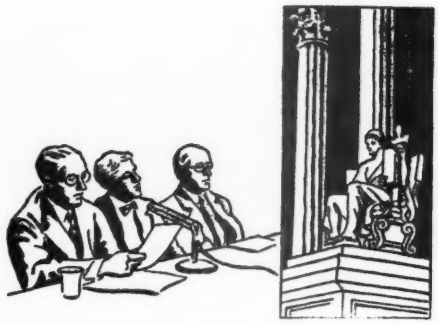
Blasts Utility Removal Ruling

A STATE attorney general's opinion of the federal-aid interstate highway system could cost 213 towns, cities, and villages in Texas $15 million to $20 million, Texarkana Mayor A. P. Miller, Jr., said recently.

Speaking as president of the 585-member League of Texas Municipalities, Miller asked that Attorney General Will Wilson reconsider his recent opinion or ask the courts to resolve it.

Miller said he was referring to the January 21st opinion in which Wilson ruled federal and state funds could not be used to relocate utilities where movement is required for construction of the new interstate highway system.

"The situation local people now face is far different than the provisions of House Bill 179 enacted by the 55th legislature and signed by the governor," Miller said. The legislation, he said, was "designed to equalize the burdens across the nation for this vast system of federal defense highways."



Progress of Regulation

Trends and Topics

Characteristics and Character of Commissions

THOSE familiar with the history of public utility regulation understand that commissioners are not judges, although they exercise quasi-judicial functions in hearing testimony and deciding controversies. Their responsibilities extend into legislative and administrative fields requiring familiarity with the industries they regulate. Without this type of regulation the public utility industry, which is necessarily monopolistic, could not have survived, so as to provide citizens with telephone, radio, television, electric, gas, and other services. Failure to discover these facts appears to be an oversight which led to some of the criticisms presented before the House Subcommittee on Legislative Oversight in its investigation of federal commissions. Commissioners, like Congressmen, must know what is going on. Attendance at conventions where the problems of regulated industries are explained and discussed is essential.

The necessity of obtaining from industrial representatives information relating to a regulated industry was recognized by the court of appeals in the Van Curler case (236 F2d 727) when it found nothing improper in the Federal Communications Commission's consideration of calls and conversations in regard to nation-wide problems, concerning which the commission was seeking advice and information preparatory to setting up a general nation-wide rule-making proceeding.

Accusations of Misconduct

Attacks upon commissioners by dissatisfied members of the public are nothing new, but the critics have had little success in pressing their case. An instance of this sort may be noted in the action brought by the attorney general of Connecticut, on demand by electors, for removal of the commissioners under a statute providing for removal because of misconduct, material neglect of duty, incompetence in the conduct of office, or active participation in political management. The action revolved around the failure of the New York, New Haven & Hartford Railroad Company to eliminate grade crossings and the alleged

failure of the commission to require such removal in accordance with statutory requirements.

The Connecticut superior court dismissed the action after finding that if the commission had ordered such elimination, the company would not have had the means necessary for the installation of safety devices of far greater importance to the safety of the public. It would not have had the means to provide efficient or economical service to the public. Bankruptcy might be threatened. The commissioners "employing wisdom, judgment, foresight, and industry of high character" had co-operated with the "able and efficient management of the railroad in saving that institution, the most important to the welfare of this state" (PUR1931D 473, 483).

Bias or Prejudice

Public pressure to influence commission action has been resisted, and accusations of bias or prejudice have been withstood, as noted in comments on commission action and responsibility published in this department of the FORTNIGHTLY, July 19, 1956. The question of prejudice arose again in a case before the Ohio supreme court. The commission had refused to disqualify the chairman from participating in a case where a motor carrier alleged prejudice and bias evidenced by statements to the public press relating to charges of bribery, violations of union contracts, overloading, and other violations of law. The court was not convinced that prejudice existed. The evidence indicated only a belief by the commissioner that action should be taken against motor transportation companies if they violated the laws (10 PUR3d 182).

An applicant for fees and reimbursement of expenses in a proceeding before the Securities and Exchange Commission sought to have two members of the commission disqualified because of statements made in a release to the press, and by the chairman in a letter to a newspaper. These were in response to reports that had been published and made the subject of newspaper editorial comment that a congressional investigation had been ordered with respect to the commission's alleged "favored treatment" of a corporation. The statements had been issued pursuant to the authority of the entire commission and "were made in the discharge of what this commission considers to be its responsibility" as an agency accountable to the Congress, and ultimately to the public, to respond promptly to charges affecting the integrity of its administration. The applicant for fees, said the commission, was the source of public misconception. The commission said it is obvious that the exercise by an administrative agency of its public responsibilities to respond to public charges respecting its administration cannot disqualify the agency from continuing to exercise its quasi-judicial functions with respect to matters which may have a relationship to the subject matter of public discussion (91 PUR NS 44,46).

Politics was injected into a rate case brought before a federal court to restrain the enforcement of rates fixed by the Georgia commission. It was contended that the commissioners were disqualified and under duress. It was asserted that they had been appointed by a governor elected on a platform promising rate reductions, that he removed their predecessors because of in-

activity and appointed the present commissioners after ascertaining that they were in sympathy with his program. He had repeatedly announced publicly that he would remove these and appoint others if they did not reduce rates, so that their salaries and offices were at stake. There was no allegation that there was any promise by the commissioners or demand by the governor that the particular rates involved in this case should be reduced. The court said that notwithstanding political platforms and administrative policies, appointees who take the oath of office must be considered to act honestly and in accordance with law and duty except as their official acts prove otherwise (6 PUR NS 359).

Review of Current Cases

Cost of Capital Based on Hypothetical Debt Ratio Determines Telephone Rate of Return

ALLOWING a rate of return of 6.19 per cent on a present fair value rate base, the Delaware commission granted the Diamond State Telephone Company a rate increase affording about $502,000 of additional net revenues, an increase of approximately 30 per cent. As this sum is considerably less than the amount which the company would earn under a rate increase already put into effect under bond, the excess collections must be refunded.

Fair Present Value

Diamond State presented an estimated reproduction cost rate base of about $39.5 million, while the state's witness submitted book cost figures of only about $31.5 million. The company contended that its rate base should be predicated solely on the reproduction cost study. This study consisted largely of trended book cost or estimated book cost. Little testimony was submitted in support of the reproduction cost evidence.

Trended Cost

The commission observed that trended cost is only a measure or an indication of value and is not synonymous with present value itself. The inherent weakness in any trended cost study as a measure of present value lies in the fact that the presently existing plant would not be reproduced in its existing state.

A substantial part of the difference between current cost and book cost arose from central office equipment and the large PBX accounts where the company applied Western Electric index numbers to produce its estimated reproduction cost. The indexes were based on theoretical or sample offices. A list of materials for a hypothetical office was priced out and then related to other priced-out lists at other times, so as to afford a trend of price changes. The composite price changes were assumed to be applicable to Diamond State. The commission regarded this trending as unsatisfactory.

Other indexes used by the company were inadequately supported by evidence. The company proposed to apply an "estimated theoretical depreciation reserve" which was substantially less than the actual reserve. The commission noted that the actual reserve had in fact been paid for by the ratepayers. Cash working capital was denied since customers' deposits,

advance billings, and accrued taxes afforded ample cash to meet this capital requirement.

Most of the company's present plant has been added in the last few years, so that the inflationary influences of recent years have been built into the rate base. The commission fixed the rate base at $35 million, about midway between the book cost submitted by the state witness and the reproduction cost claimed by the telephone company.

Cost of Capital

Abundant evidence was submitted on the issue of capital cost. The company's actual debt ratio was only 7 per cent. It proposed a hypothetical ratio of 35 per cent. This was adopted. The commission found that the cost of additional debt capital would not be more than 4.50 per cent and determined an overall cost of debt of 4.30 per cent.

The company witness, in determining the cost of equity capital, inquired into alternative investment opportunities in other types of equity, along with the market and financing experience of American Telephone and Telegraph, the parent corporation. The cost of equity money, he declared, is the expected earnings, expected dividends, expected increase in book value, and expected market appreciation which induce an investor to purchase equity securities. He found that equity capital would likely cost the company more than 9 per cent.

But the commission did not approve this method. His approach completely ignores the company itself, said the commission, and simply assumes without warrant that the experience of the electric utility industry and that of the Bell system will suffice. On this assumption, the witness had applied his theory which purported to reflect investor expectations.

State's Witness

The state's witness demonstrated that Diamond State afforded at least as good an investment opportunity as was provided by the Bell system or the five Bell operating companies whose stocks are traded. He analyzed the dividend yields and earnings-price ratios of these operating companies and computed the cost of equity, recognizing the effect of capital structure and dividend pay-out. He used a debt ratio of 45 per cent and recommended a dividend pay-out of 85-90 per cent on the basis of an analysis of dividend pay-outs and charges to surplus of both the Bell system and Diamond State. He found a cost of equity between 7.40 and 7.65 per cent.

While the commission thought the state's witness provided the best evidence on the issue, it fixed the overall cost of equity capital conservatively at 7.20 per cent. This figure, composited with debt capital cost of 4.30 per cent, assuming a 35 per cent debt ratio, resulted in an overall cost of capital of 6.19 per cent. The fair rate of return was fixed at 6.19 per cent.

Revenues and Expenses

Interest on plant under construction was included in revenues since such plant, though not income-producing, was allowed in the rate base. Charitable contributions were not allowed as an expense on the ground that ratepayers might otherwise be forced to donate to charity against their will. Wage increases granted during the test period were given full effect, as was a state income tax passed after the hearings. The company's federal income taxes were adjusted to reflect the benefits resulting from a consolidated return filed by the parent company. *Re Diamond State Teleph. Co. Docket No. 210, Order No. 374, January 15, 1958.*

FPC Refuses to Apply Memphis Ruling Pending High Court Decision

In view of the grave implications of the Memphis decision (21 PUR3d 209) on the rate-making process, the Federal Power Commission has indicated that it will continue to accept rate changes for filing and processing under § 4 of the Natural Gas Act, pending appeal of the court ruling. Bond requirements, however, may be adapted to the uncertainties of the present situation. The commission accordingly denied motions by customer companies and California state authorities to dismiss a rate increase request filed by El Paso Natural Gas Company under § 4(d). Rate increases of about 10.5 per cent were allowed to go into effect January 1, 1958, under bond, subject to refund to the extent that such increases may be held to be unlawful.

Prior to 1949 El Paso fixed its rates by individual agreements with each customer and filed such rate agreements with the commission as scheduled under § 4 of the Natural Gas Act. In 1949 the company complied with the commission's Order No. 144 which required all pipeline companies to restate their rate contracts in the form of gas tariffs.

As a result of settlements and new service agreements, based on proceedings before the commission, all of El Paso's pre-1949 contracts have been terminated on consent and superseded by uniform tariffs. None of the company's customers, therefore, are presently entitled to receive gas at the old contract prices. The commission concluded that El Paso's legal rates at present are those set forth in its filed gas tariffs.

"While the commission, as a regulatory agency, must and does give full effect to the decisions of courts, it is not convinced that the reasoning of the court of appeals in the Memphis case represents the intention of Congress as expressed in the Natural Gas Act or that it would be in the public interest for the commission to follow that decision until the final word has been spoken," the commission stated.

Regulation of Contracts and Tariffs

The commission pointed out that the reasons which led it to adopt Order No. 144 requiring pipelines to use rate schedules in tariff form rather than the private contracts previously in use are even more valid today than in 1948 when the order was promulgated. The gas business has greatly expanded during the interim years. About 100 tariffs efficiently replace many thousands of separate gas contracts, with a great simplification of the commission's responsibilities in reviewing rates. The use of tariff forms is necessary to avoid the risk of unjust discrimination, said the commission.

Gas supply contracts with distributing customers must be long-term as to quantities and service conditions, though not as to price. Under present practice, the commission pointed out, an initial price is established, leaving future prices to be fixed by future "effective" tariffs under § 4(e) as the pipeline's costs may change. Under the Memphis rule, and absent customer agreement to each specific rate increase, pipelines might be under compulsion to fix at the outset firm future prices for the entire term of each contract. The commission thought such prices fixed by contract would tend to be higher than prices finally becoming effective under the present § 4 practice. Rates under private contract may tend to reflect the particular bargaining process rather than the public interest in uniformity.

The commission viewed with concern the problem of supervising rates if contract rates are required to be substituted for uniform tariffs under the Memphis ruling. The commission noted that it could examine separate contracts in § 5(a) proceedings and prescribe tariff form rates in place of contract rates found to be discriminatory or unreasonable. Thereafter, the pipeline could file rate changes under § 4(d) without consent of customers and have them processed under § 4(e). But all this would bring the commission additional work and delay.

Impact of Refunds

The commission now has pending before it rate increases sought by 34 pipeline companies. The annual gross income of these companies presently collecting or proposing increases was reported as being $1.3 billion in 1956. The refunds of this group under the Memphis ruling could be a sixth or more of their gross revenues for a single year. Any refunds of these proportions, the commission commented, would have a severe impact upon the industry.

Along with these considerations, the commission noted that the Memphis decision will impair the pipeline's ability to secure financing and expansion. *Re El Paso Nat. Gas Co. Opinion No. 308, Docket No. G-12948, January 24, 1958.*

Advertising Relating to Public Power Ownership Not Chargeable to Operating Expense

ADVERTISING and other expenditures devoted to influencing public opinion either for or against public ownership of power facilities are not just and reasonable operating expenses of utilities, the Wisconsin commission ruled. Such items must be included in the miscellaneous income deductions account.

The commission made it clear that it took no position one way or the other with respect to public ownership of power resources.

Nor did it seek in any way to influence public opinion or to restrict the right of any person to express or publicize his opinion. The order dealt solely with the manner of accounting for these particular costs. *Re Uniform System of Accounts for Electric Companies, 2-U-4937, December 19, 1957.*

Production of Relevant Evidence by Third Parties Held Proper in FCC Investigation

THE United States district court held that material sought by the Federal Communications Commission to aid in a broadcasting network study could be required by subpoenas *duces tecum* or a commission order requiring the production of evidence. In granting the commission's petition to enforce the subpoenas and the order, although imposing restrictions on voluntary disclosure of certain trade secrets by the commission, the court commented on some interesting points raised by respondents.

Respondents did not seriously contend that they were altogether beyond the subpoena power of the commission or that there were not legitimate inquiries which the commission might make of them. They

asserted, however, that commission jurisdiction under the act was basically confined to licensing and regulation of broadcasting in its various aspects. Since they merely supplied programs for such transmission, in some instances to sponsors or advertisers and in other instances to the broadcasting stations, and were not licensees or permittees of the commission, they argued that the commission had no more power to require them to disclose the intimate details of their business affairs than it would to compel manufacturers or suppliers of equipment used in such broadcasting, or one who sold stationery or motorcars to the broadcasters, to make such disclosure.

The court pointed out that such argument illustrated the necessity of drawing lines between the protection of the public interest within the proper confines of the powers granted by Congress to an administrative body such as the commission and the rights of individual businessmen to pursue their legitimate business activities without being subjected to unnecessary and harassing government inquisition. In the case at bar, the commission concluded that respondents came within the framework of the powers of inquiry granted by Congress to the commission upon subject matter which vitally affects the public interest. Under these circumstances, the rights of the individual businessman to privacy in his business affairs must yield to the paramount public interest.

The power of subpoena granted the commission is not confined to those over whom it may exercise regulatory jurisdiction, but extends to any persons from whom it can obtain information and documents which are relevant to its lawful inquiry. *Federal Communications Commission v. Cohn et al. 154 F Supp 899.*

Commission Rules against Use of Special Facilities Are Controlling

THE West Virginia supreme court reversed a commission order which ruled that a motor carrier of general commodities had authority to operate a moving van, where such operation was plainly in violation of commission rules excluding such authority from the carrier's general commodities certificate.

The rules provided that a certificate authorizing motor transportation of general commodities should not include the use of "special" motor vehicles. They further provided that a moving van was a "special" motor vehicle. The court held that since the provisions were plain and unambiguous, the commission was bound to apply them merely and not construe them.

In interpreting the rules as allowing the carrier to operate a moving van, the commission committed an error of law.

Earlier, the commission had approved an attempted transfer of the existing certificate but on the specific condition that the transferee should not operate a moving van. The certificate was not accepted by the transferee, however, and the commission subsequently canceled its order of approval. Upon cancellation of the uncompleted transfer, the certificate as originally issued, without the limitation imposed upon the transferee, remained in force and effect, and the commission rules relating to special vehicles applied. *English Moving & Storage Co. et al. v. West Virginia Pub. Service Commission, 100 SE2d 407.*

Snake River Project Disapproved as Not Best Adapted To Comprehensive Development

THE Federal Power Commission denied the request of Pacific Northwest Power Company for a license under § 4(e) of the Federal Power Act to construct and operate a hydroelectric project on the Snake river between Idaho and Oregon. The project comprised two developments known as the Mountain Sheep and Pleasant Valley developments. It was denied on the ground that it was not best adapted to a comprehensive plan for developing the river, within the meaning of § 10(a) of the act.

The Snake river is the largest tributary of the Columbia river, and the Snake river basin is said to be the largest present producer and the largest potential source of hydroelectric power on the continent. The river is navigable federal water for a distance of nearly 900 miles from the point of its junction with the Columbia.

The proposed Mountain Sheep dam, 255 feet high, would be located at river mile 192.8 and would provide usable pondage of about 46,000 acre-feet. The initial generating capacity would be 282,000 kilowatts and ultimately 376,000. The proposed Pleasant Valley dam, 534 feet high, would be constructed about 20 miles farther upstream, having a reservoir extending upstream to the low Hell's Canyon site with a usable storage capacity of 500,000 acre-feet. Generating capacity would be 720,000 kilowatts initially and 864,000 ultimately.

The project would be integrated with the Northwest Power Pool. The capacity and energy that could be produced by the project could be utilized in the Pacific Northwest as soon as it could be made available. The commission thought the project would be feasible from an engineering and economic point of view.

Comprehensive Development

Whenever there is more than one possible project that in combination with others may develop a stretch of river, the commission is authorized to grant a license only for the one which is best adapted to a comprehensive development plan, as required by § 10(a) of the Federal Power Act. Such a comprehensive plan, said the commission, is one that will permit development of all of the beneficial uses of the water resources that are reasonably necessary and desirable, considering the potentialities of the particular project.

The commission had before it the report prepared by the Corps of Engineers of the United States Army filed with Congress in 1948. It set forth a broad plan for the development of the water resources of the area in the interest of flood control, navigation, power, irrigation, etc.

The commission staff developed two alternative plans for the middle reach of the Snake river between the Hell's Canyon project and the sites on the Lower Snake authorized for federal development. The principal feature of Plan I, which the commission considered the better one, was the Nez Perce dam which would store the waters of both the Snake and the Salmon rivers. It would develop a head of 595 feet, providing usable storage of 3.9 million acre-feet. The Lower Canyon project in Plan II would provide total storage usable for flood control of about one-half of this amount.

The commission said it was readily apparent from the studies made by the Corps of Engineers and from those by the staff for the Middle Snake basin that any combination of projects that includes Nez Perce would be superior to any combina-

tion of projects without this dam. The commission observed that Nez Perce, together with existing storage and that under construction in the Snake basin, would supply all the storage needed to control the flows of the Salmon and the Middle Snake river for the prevention of flood damage downstream on the Columbia and for economic power development. It was noted that the Nez Perce development would be economically feasible for private as well as federal financing and construction.

The commission found that the power output attributable to the Nez Perce project would be over two-thirds more than the output attributable to the Mountain Sheep-Pleasant Valley project. It appeared that the denial of a license for the Mountain Sheep-Pleasant Valley project need not adversely affect the power supply in the Northwest. Enough projects are contemplated or under way to supply requirements until other sources of supply can be obtained. While the Mountain Sheep-Pleasant Valley developments would provide no navigation benefits, the staff's plans would benefit navigation by the release of dammed water to maintain stream flow.

Anadromous Fish Passage

Of considerable controversy was the relation of the Nez Perce project to the fish runs on the Columbia. It was urged that a high Nez Perce dam would be injurious to anadromous fish. The commission noted that several reasonably successful methods exist for the upstream passage of fish where high dams are located. It observed that although no comparably successful method had been devised for downstream passage, research on that problem was under way in connection with other projects under commission licenses. The skimmer device, recommended by the Secretary of the Interior at the Brownlee dam on the Snake river, was suggested as the most promising method for downstream passage. The commission seemed to think the fish problem at Nez Perce could be solved. *Re Pacific Northwest Power Co. Opinion No. 307, Project No. 2173, January 20, 1958.*

ICC's Unrestricted Certificate to Rail-owned Motor Carrier Upheld

After the Interstate Commerce Commission had authorized a railroad to purchase the operating rights of a motor carrier, in a proceeding under § 5(2)(b) of the Interstate Commerce Act, the restricted certificate issued thereunder was modified in a subsequent § 207 proceeding. In the latter proceeding, the motor carrier's application for a certificate of unrestricted operations was granted.

On appeal from a lower court judgment upholding the commission's action, the United States Supreme Court affirmed. The court ruled that the issuance of the unrestricted certificate in the § 207 proceeding was within the commission's power, that the evidence was sufficient to support the commission's findings, and that issuance would further the public convenience and necessity.

Departure from Limitations

Although the underlying policy of § 5(2)(b) must not be divorced from proceedings for new certificates under § 207, pointed out the court, the commission does not act beyond its authority when, in the public interest, it occasionally departs from the auxiliary and supplementary limitations in a § 207 proceeding. Proceedings

under each section are separate and distinct, notwithstanding that the same general policy governs both.

The mere fact that a carrier has just emerged from an acquisition proceeding under § 5(2)(b) does not act as a deterrent, in so far as the commission's discretion, in a § 207 proceeding, to an unrestricted grant.

The evidence left the court unwilling to suggest that public convenience and necessity could be advanced only by confining the carrier to service of smaller communities, as advocated by appellants, while leaving the more profitable business to others. Public need for the carrier's operation in truck-load traffic to some extent could be grounded on the need for its operation in peddle traffic, since economic justification for carrying on a costly peddle operation depends on combining it with a more lucrative operation.

Unprofitable Operation

While true that railroads were not allowed to enter the motor trucking industry primarily to build an independently profitable trucking operation, the court pointed out, there was no foundation in the act for construing § 207 as requiring that any railroad operation in the motor trucking field be unprofitable. Observance of economic realities in ascertaining public need is no less due a rail-owned motor carrier than an independent motor carrier. *American Trucking Asso., Inc. et al. v. United States et al. 2 L ed 158, 78 S Ct 165.*

Commission Lacks Power to Halt Private Company Service to State Agency in Municipal Plant Territory

THE North Dakota supreme court ruled that the state commission had no authority to interfere with the action of the state board of administration in making and carrying out a contract with a privately owned electric company for the furnishing of light and power to a state school under the board's jurisdiction.

Early in 1955, the board and Otter Tail Power Company entered into the service contract, and the commission subsequently approved it. Shortly thereafter the city of Grafton, where the school was located, filed a complaint with the commission asking for an order to compel the company to refrain from supplying power to the school or to any other premises located within the city limits.

Grafton had a municipal plant and was able to provide adequate electric service to the school. The board owned the facilities which connected with the company's lines outside the city limits. The commission ordered the company to cease and desist from furnishing service. The district court reversed the commission, and an appeal was taken to the state supreme court.

State's Power Supreme

The city of Grafton contended that the power of the board to purchase electric service for the school was limited in two respects. First, it was said that the board could contract with utilities only in accordance with rules and regulations of the commission governing utilities and that the sale of electricity outside the city limits for conveyance over the board's power lines into the city violated those rules and regulations. Secondly, it was asserted that the maintenance of the board's power line across a road on the city's boundary violated a constitutional provision requiring municipal consent before city streets may be used for utility purposes.

The court observed that the board, in exercising its duty to administer the state school, acted as an instrumentality of the state. Neither the powers vested in municipalities to own and operate electric plants nor the powers of the commission to regulate public utilities derogate from the state's sovereign power to operate its charitable institutions, whether they be located within or without the limits of a municipality.

The court interpreted the constitutional provision which the city invoked in its second contention as being not a grant of power to municipalities but a restriction upon the legislature designed to prevent it from authorizing indiscriminate use of city streets by utilities without control by local authorities. But only to this extent is it a limitation on the sovereign power of the state. It cannot be interpreted as a restriction on the state itself to use the city streets for governmental purposes. This constitutional provision, therefore, had no bearing on the controversy, said the court, and it afforded no basis for the commission's cease-and-desist order.

No Franchise Contract

The city further argued that the action of the board in some way violated a contract existing between the state and the city of Grafton. The contract was supposed to issue from the statutory authority of the city to own and operate a municipal plant. The court indicated that the statute did not grant, as against the state, an exclusive franchise. But even if such a contract could be drawn from the circumstances, the commission would have no jurisdiction either directly or indirectly to enforce it, said the court. *City of Grafton v. Otter Tail Power Co. of Fergus Falls et al. 86 NW2d 197.*

Emergency Power Connection Authorized

THE Federal Power Commission authorized Kansas Power & Light Company to make a permanent connection, for emergency use only, between its facilities and those of Kansas City Power & Light Company. The commission found that the applicant's facilities are not used for the transmission or sale at wholesale of electric energy in interstate commerce and that the company is not therefore subject to federal jurisdiction.

Kansas City Power, however, was found to be subject to the commission's jurisdiction.

Section 202(d) of the Federal Power Act limits any grant of authority to make emergency connections with an electric utility subject to federal jurisdiction to "person(s) engaged in the transmission or sale of electric energy and not otherwise subject to the jurisdiction of the commission . . ." *Re Kansas Power & Light Co. Docket Nos. E-6568, E-6749, January 6, 1958.*

Securities Authorized with Five-year Bond Redemption Restriction

THE Wisconsin commission authorized a telephone company to issue, in addition to $2.1 million par value of common stock, approximately the same amount of 5¼ per cent, 30-year, sinking-fund bonds at not less than their principal value plus accrued interest. The bonds will be privately placed with institutional in-

vestors. A finder's fee of one-half of one per cent was approved.

The commission approved a 5-year redemption restriction against refunding with lower cost debt money. The restriction does not apply, of course, to the sinking-fund retirement. A gradually diminishing redemption premium of 6 per cent was also approved. These features of the issue were not discussed beyond a finding that the terms were reasonably necessary.

Proceeds from both issues will be used to retire short-term bank loans and pay for additions to plant. The company's *pro forma* capital structure showed some improvement, with common stock and surplus amounting to 39.8 per cent, preferred stock 12.5 per cent, and debt 47.7 per cent. *Re General Teleph. Co. of Wisconsin, 2-SB-709, December 27, 1957.*

Hydrocarbon Fractioning Operations Included in Integrated Gas System

THE Securities and Exchange Commission authorized Columbia Gas System, Inc., a holding company, to acquire the common stock and instalment notes of its newly formed subsidiary, Columbia Hydrocarbon Corporation, to finance the latter's plant construction and business of fractioning and marketing the heavier hydrocarbons extracted from the system's natural gas supply. It also exempted the issuance and sale of the securities under § 6(b) of the Holding Company Act.

Present Columbia System

The present Columbia System consists of Columbia, 13 operating subsidiaries, and a subsidiary service company. The operating subsidiaries are engaged in the production, purchase, storage, transmission, and distribution of natural gas. Some of these subsidiaries also produce and sell gasoline and other hydrocarbons. One subsidiary produces and sells oil.

In 1944 the commission held that hydrocarbon extraction operations were retainable in the holding company system (57 PUR NS 444). United Fuel Gas Company, one of the system's major gas-producing companies, has been engaged in hydrocarbon extraction operations for many years. The gas produced and purchased by it is particularly rich in the heavier hydrocarbons, the removal of which has been found necessary in connection with the pipeline transmission of natural gas for resale.

Building Program

United Fuel is in the process of building a new extraction plant. It proposes to sell the liquid stream of mixed hydrocarbons to be produced at its new plant to Hydrocarbon Corporation. It has been estimated that gross revenues from the sale of the heavier hydrocarbon products under the joint program of United Fuel and Hydrocarbon Corporation will increase from around $3 million to more than $6 million in 1960.

Hydrocarbon has proposed to build a plant to fractionate the liquid stream of hydrocarbon purchased from United Fuel into natural gasoline, butane, and propane. The new securities are to be sold to finance this building program.

It was estimated that United Fuel would realize a net return of about 11.6 per cent on its net plant investment in the first full year of operation, and Hydrocarbon would realize a net return of about 12.4 per cent on its investment in such

year. In addition to processing the natural gas for pipeline distribution the effect of the joint program would be: (1) to obtain for United Fuel an advantageous market for the large quantities of its heavier hydrocarbons, (2) to eliminate the present uneconomic use of valuable natural resources, and (3) to obtain for the holding company's investors an appropriate realization of the economic values contained in the natural gas resources involved.

Statutory Standards

The question whether the system might engage in the fractioning operations proposed for Hydrocarbon was a question not essentially different from that presented in 1944 when the commission considered the retainability of the system's hydrocarbon operations as then conducted (57 PUR NS 444).

The federal commission pointed out that the joint extraction and fractioning operation would be conducted in modern plants with more efficient facilities and improved techniques, would continue to be appropriate in conditioning gas for transmission and distribution as a fuel, and would be subordinate in size to the system's retail gas operations.

Functional Relationship

Although part of the hydrocarbon operations formerly conducted by United Fuel would be taken over by the new company, this was largely a matter of managerial discretion. The contractual arrangement between the two companies was deemed to be fair and, said the commission, if any question should arise, in connection with United Fuel's utility rates, as to the propriety of the division of the net proceeds resulting from the joint operations, the commission having jurisdiction might determine the question without regard to the terms of the contract. Therefore it concluded that the proposed business of Hydrocarbon was reasonably incidental or economically necessary or appropriate to the operations of the system's integrated gas utility system as required by §§ 10(c)(1) and 11(b)(1) of the Holding Company Act.

The commission's conclusion that the Columbia System might engage, through Hydrocarbon, in the business of fractionating into its several components the stream of mixed hydrocarbons produced by another subsidiary company was based upon the fact that this business was functionally related and therefore reasonably incidental to the system's gas production operations and the conditioning of the gas thus produced for transmission to the system's gas utility properties found retainable in 1944. *Re Columbia Hydrocarbon Corp. et al. File No. 70-3610, Release No. 13610, November 27, 1957.*

Gas Well-drilling Expense Allocated on Basis of Use

THE West Virginia commission disapproved a rate increase proposed by Godfrey L. Cabot, Inc., a natural gas company, but it did authorize a smaller increase calculated to yield a return of 6.5 per cent on a net original cost rate base.

The difference between the commission and the company estimates involved two issues: (1) the manner of treating the maintenance of drilling and cleaning equipment expense, and (2) the method of allocating the company's earnings deficiency to classes of customers.

The company assigned the total cost of maintaining well-drilling equipment to expense. The commission, on the other hand, assigned part to expense and part to utility plant account. The commission

based its position on the fact that such equipment is used not only to clean and maintain wells that are in service, but also to drill new wells.

Since the equipment is used to drill new wells, the commission allocated the cost of its maintenance on the basis of its use. It held that when that equipment is used in making capital improvements, the maintenance expense should be assigned to the cost of those improvements.

Allocation of Cost to Customers

The company assigned the total earnings deficiency to residential, commercial, industrial, and miscellaneous customers, although it also has wholesale customers, claiming that without the latter customers it would not be able to serve the retail customers at as low rates as it has been doing. No evidence was offered in support of this claim, however.

The commission used the cost-of-service method of determining what costs were assignable to each class of customer. This case involved only retail rates. The commission allocated part of the earnings deficiency to wholesale service and reduced the amount assignable to retail service.

The commission did not take the position that it is never proper to depart from a cost-of-service study in assigning a deficiency between classes of customers; it said that the justification for doing so must be clearly shown, and that was not done in this case. *Re Godfrey L. Cabot, Inc. Case Nos. 4600, 4524, January 20, 1958.*

Water Company Authorized to Refund

THE Missouri commission authorized a water company to refund customer overcharges resulting from the company's indiscriminate application of multiple minimum charges to any or all customers. The commission pointed out that while it could not legally require the company to make such refunds, it would authorize the refunds in this case because the company had voluntarily offered to make them if the commission's interpretation of its filed minimum charge regulation differed from that of the company's.

The commission thought that the intent of the rule permitted multiple minimum charges only where multiple dwellings or interconnected structures were supplied through one registered customer. The method by which the company was to make the refunds was set forth in the opinion. *Re Rockaway Beach Water Co., Inc. Case No. 13,746, November 22, 1957.*

Extended-area Service and Rate Reclassifications

THE Indiana commission authorized a telephone company to establish extended-area service to replace presently existing toll service between certain exchanges. The commission found that the overall service plan proposed by the company was in the public interest, and was generally in the interest of the subscribers to be served. The plan was desired by a substantial majority of all the subscribers from the exchange areas involved, and a community of interest existed between the exchange areas.

The company was also authorized to extend its rate purpose classification for the exchanges involved to a higher classification. The commission had long followed the policy of statewide basis of rate

making, it was pointed out, and as telephone exchange areas have exceeded the upper limits of the then effective rate purpose classifications, they have been reclassified to higher applicable rate purpose classifications. Exchange areas should continue to be so reclassified as to rate purpose classification, held the commission, on the basis of main telephones available, in accordance with the commission-approved rate structure applicable to the company. To do otherwise would result in improper discrimination among exchange areas from a rate-making standpoint. *Re Indiana Bell Teleph. Co. No. 27166, August 9, 1957.*

Discontinuance of Unprofitable Railroad Passenger Service Authorized

THE Maryland commission authorized the Pennsylvania Railroad Company to discontinue two passenger trains which were being operated at a loss. Passenger use of the trains had declined from about forty-one passengers per trip on one train to about five, and from about twenty-nine passengers to about four on the other train.

The commission observed that the service rendered by the two trains served no public need and that there was available adequate bus service offering a much greater variety of schedules. Furthermore, the buses in the area operate at approximately equal speed with the trains involved in this case. Evidence also indicated that the discontinuance would not result in reduced mail or express service in the area.

Guiding Principles

The principles laid down in Hessey *v.* Capital Transit Co. (80 PUR NS 513) were deemed to be applicable to the present case. In the Hessey case the Maryland court of appeals held that a railroad company organized and conducted for private corporate profit, but devoting its property to the use of the public, does not do so irrevocably or absolutely, but upon condition that the public will supply sufficient traffic on a reasonable rate basis to yield a fair return. To compel a railroad to continue at a loss, it said, would amount to the taking of property without just compensation in violation of the due process clause of the Fourteenth Amendment of the Constitution of the United States.

The court specifically held that a common carrier cannot be compelled to carry on even a branch of its business with resulting loss, unless it is necessary for the fulfillment of its corporate duties. If one branch of its service is unprofitable, the court said, it would be neither good business nor justice to compel the company to continue that branch merely because the loss could be offset by profit on the rest of its service. *Re Pennsylvania R. Co. Case No. 5543, Order No. 53156, December 19, 1957.*

Other Recent Rulings

Telephone Service Improvement. The Indiana commission authorized a telephone company to improve service by replacing its 4-party urban service with 2-party service and by replacing its 8-party suburban service with 4-party service,

with full selective ringing, and by establishing a flat rate zone charge system in place of the mileage charge system for suburban service. *Re Indiana Bell Teleph. Co. No. 27379, November 15, 1957.*

Water Company Return. The New Jersey commission considered a return of 6 per cent reasonable for a small water company. *Re Neptunus Water Co. Docket No. 10173, October 30, 1957.*

Cost of Capital. On remand from the court, the Pennsylvania commission, in determining that a return of 6.46 per cent on a telephone company's fair value rate base was not unreasonable, commented that capital cost rates and an appropriate capital structure with which cost rates are to be weighted cannot be computed with precise mathematical certitude, and that judgment determinations of these factors must be considered along with other intangible aspects pertaining to the specific evidence. *Pennsylvania Pub. Utility Commission v. Commonwealth Teleph. Co. C. 15864, C. 15845, December 23, 1957.*

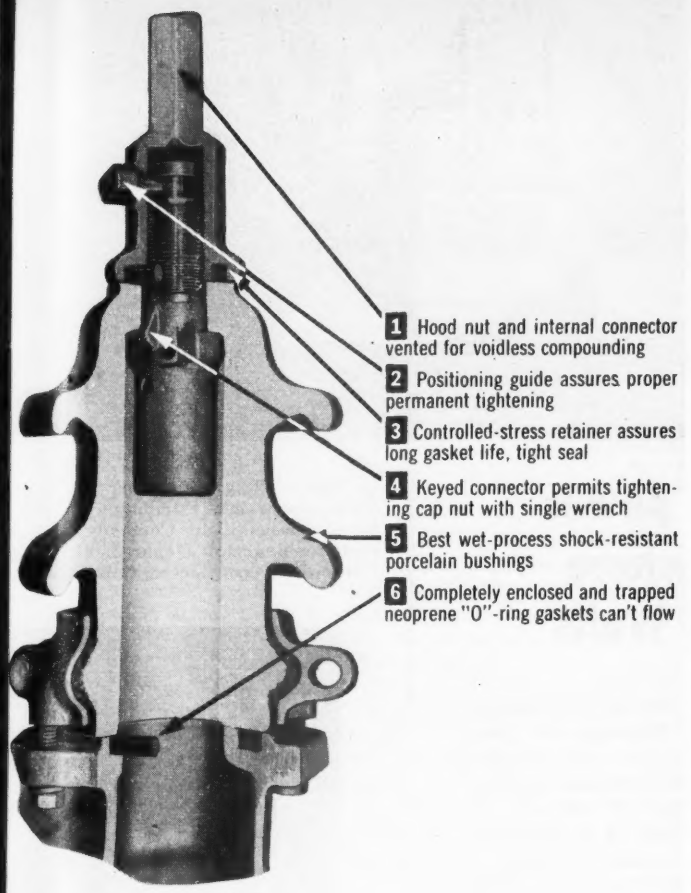
Electric Company Bonds Authorized. Holyoke Water Power Company, requiring funds for the construction of a steam-generating plant, obtained authority from the Federal Power Commission to issue to institutional investors, without competitive bidding, approximately $34 million of long-term, 5 per cent, sinking-fund bonds. *Re Holyoke Water Power Co. Docket No. E-6744, December 27, 1957.*

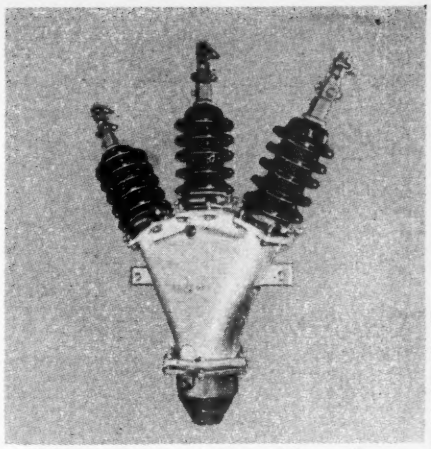
Electric Securities Issue. The Federal Power Commission authorized Iowa Power & Light Company to issue at competitive bidding $10 million of 30-year bonds, together with $5 million of preferred stock to be sold to a group of underwriters, in order to provide funds for the discharge of short-term bank debt and for construction. *Re Iowa Power & Light Co. Docket No. E-6793, January 7, 1958.*

Bond and Stock Issues. An electric company requiring funds to satisfy bank loans and to pay for construction secured authority from the Federal Power Commission to issue at competitive bidding $10 million of preferred stock and $15 million of 30-year bonds. *Re Pacific Power & Light Co. Docket No. E-6791, January 7, 1958.*

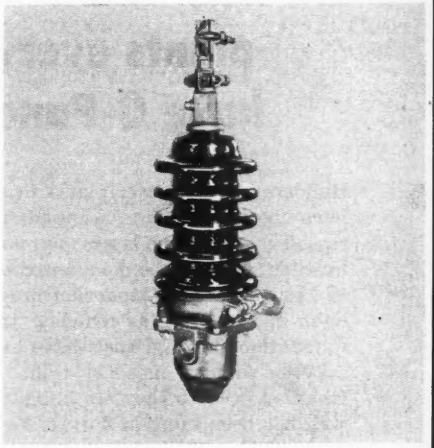
Increased Return for Debt Service. The Wisconsin commission has authorized a water utility to increase rates sufficiently to produce a rate of return of 6 per cent rather than the usual 5½ per cent for water utilities, in order to provide needed additional revenues to meet increased debt service requirements resulting from new construction. *Re City of Marinette, 2-U-4902, January 10, 1958.*

Heating System Abandonment. The Indiana commission authorized an electric company to discontinue its hot water heating system to consumers in a certain city upon a showing that the system had depreciated to the point where satisfactory service could not be maintained without reconstruction and rehabilitation of the entire system, that reconstruction would not be compensatory, and that conversion to other heating systems was economically unfeasible. *Re Indiana & Michigan Electric Co. No. 27211, November 15, 1957.*


1 Hood nut and internal connector vented for voidless compounding
2 Positioning guide assures proper permanent tightening
3 Controlled-stress retainer assures long gasket life, tight seal
4 Keyed connector permits tightening cap nut with single wrench
5 Best wet-process shock-resistant porcelain bushings
6 Completely enclosed and trapped neoprene "O"-ring gaskets can't flow



Wide range of sizes and entrance fittings, with corrugated or petticoat-type bushings, meets most outdoor and indoor cable-sealing applications. Available with either three conductors (above) or single conductor (below).



Delta-Star Permanently-Sealed Terminators keep air and moisture out for good

00 to 15,000 volts. Delta-Star SEAL-KAP Terinators reduce servicing problems. The special eoprene "O"-ring sealing design of this line of ble terminators results in a *permanently* air-tight d moisture-proof installation. Original cost, in dition to installation and maintenance costs, low.

EAL-KAP terminators are made in single- and ree-conductor styles for both outdoor and indoor service. Lightweight cast-aluminum bodies help make SEAL-KAP terminators easy to handle, contribute to their economy of installation.

GET COMPLETE INFORMATION in this new SEAL-KAP Terminator catalog. Write DELTA-STAR ELECTRIC DIVISION, H. K. PORTER COMPANY, INC., 2437 Fulton St., Chicago 12, Illinois. District offices in principal cities.

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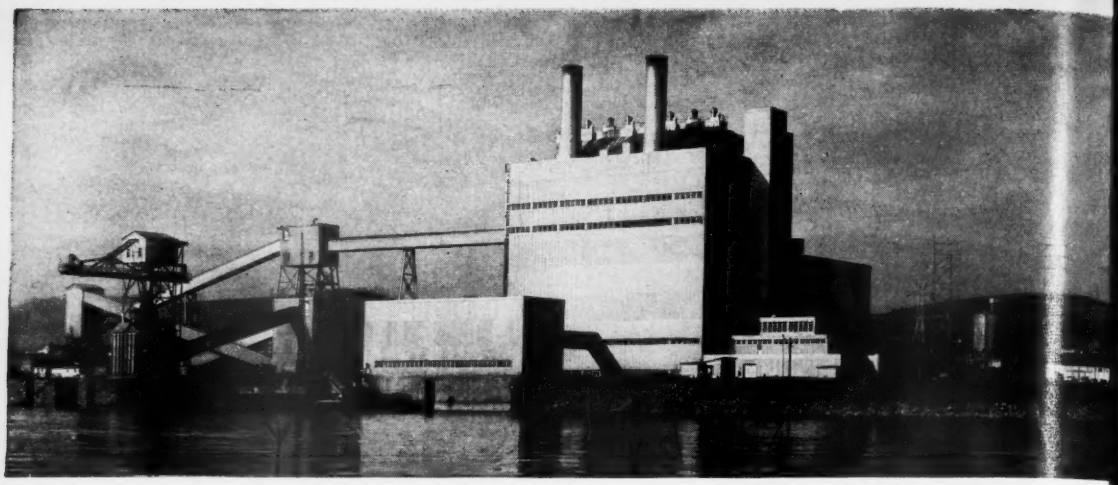
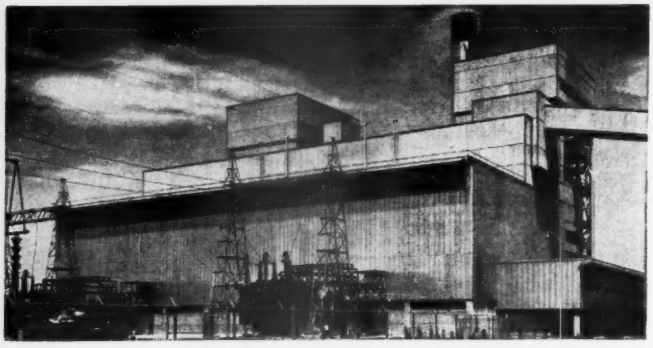


Q-Panel walls grace the new Elrama P Plant (above) near Pittsburgh. It was desi by Duquesne Light Company's Enginee and Construction Department. The D Corporation was General Contractor.

Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12″ masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.

Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were u to enclose the impressive Hawthorn St Electric Station (left) of the Kansas City, M souri, Power and Light Company. Ebasco S vices, Inc., designed and built the plant.

Robertson

Q-Panels

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Please send a free copy of your Q-Panel Catalog.

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Industrial Progress

Georgia Power Has $58,800,000 Program

HE largest construction program in Georgia Power Company's history s announced recently by J. J. Mcnough, president. Mr. McDonough id the company would invest $58,-0,000 during 1958 in new facilities serve the growing power needs of customers. This compares with out $52,000,000 spent during 1957. Among the larger items in the com-ny's construction budget are: the mpletion of a 125,000-kilowatt eam-electric generating unit at Plant tes which will go into service in ay, 1958; continuation of work on iver Dam, a 60,000-kilowatt hydro-ctric plant which will be completed 1959; and continuation of work on 75,000-kilowatt steam-electric unit Plant McManus. This unit will also completed in 1959. The three plants ll require the expenditure of $22,-0,000 in 1958.

Georgia Power Company will also vest $1,000,000 in the Southern ectric Generating Company which constructing a 1,000,000-kilowatt eam-electric plant near Wilsonville, labama. The first two of four 250,-0-kilowatt units will come into serv-e in 1960.

Nearly 900 miles of new transmis-on and distribution lines will be built, cluding an 81-mile extension of the mpany's first 230,000-volt transmis-on line constructed in 1957.

onongahela Power Announces 50 Million Expansion Program

LANS for spending more than $50,-0,000 in the next three years for panded facilities have been an-unced by Don B. Potter, president Monongahela Power Company.

Half that sum will go into a new nerating unit at the company's Wil-w Island station, a project announced several weeks ago; but approximately $8,000,000 is planned for each of the three years, premised upon the future growth of the area, to improve service facilities for residential, commercial and industrial customers. A steadily increasing use of electricity for residential purposes, along with notable industrial growth, is motivating the construction program, Mr. Potter said.

During 1957 the company added 3,-500 customers, bringing its total to 213,600. Of the new customers, 68 were industrial. The forecast estimates another 9,000 customers will be added in the next three years, with another 100 industrial customers coming on Monongahela's lines.

The new generating unit at Willow Island will cost approximately $25,-000,000. It will have a rating of 165,-000 kilowatts but is expected to generate up to 180,000 kilowatts, and will be the largest unit ever installed by Monongahela. Ground will be broken next June, with completion scheduled for 1960.

Another major project for 1958 is a new power line connecting the company's Rivesville and Willow Island generating plants. The first stage of that project, a high voltage line from Rivesville to Fairview, now is practically completed. Cost of the over-all project is estimated at $2,400,000. The line will further stabilize power supply for the entire Monongahela system, providing additional facilities for interchanging power between the two stations.

Appalachian Power '58 Construction Budget Nearly $50 Million

ALMOST $50,000,000 will be spent by the Appalachian Electric Power Company for construction of new facilities, according to G. L. Furr, Appalachian vice president and general manager.

Appalachian's budget includes a major expenditure of nearly $26 million for completion of the new 450,-000 kw Clinch river plant at Carbo, Va. The $55 million plant will go into operation during 1958.

Another $5-million is allocated toward continuation of the development of the Smith Mountain hydroelectric power project near Roanoke.

Appalachian will also spend over $6,700,000 on transmission lines and stations, including facilities to be served from the Clinch river plant. Allocations totaling over $11-million for distribution line and station work include conversion to 66,000 volts of parts of the Abingdon and Point Pleasant district, and other work in every division in the company. Another $2-million has been allocated for various other projects during 1958.

Reynolds Metals Booklet

"ANODIZED Aluminum Strip Conductor" is the title of the latest in a series of brochures published for the electrical industry by Reynolds Metals Company.

The illustrated, 12-page booklet contains detailed technical information on the advantages, applications, heat transfer properties, winding and joining of anodized aluminum strip conductors.

Featured is a computation chart for obtaining strip conductor equivalents of wire gauges and other data useful in coil design. The brochure also describes the company's engineering, laboratory and field services, which are available to electrical manufacturers.

Copies can be obtained by letterhead request to Reynolds Metals Company, 2500 South Third street, Louisville, Ky.

(*Continued on page* 26)

Commonwealth Natural Gas Plans Expansion

THE Board of Directors of Commonwealth Natural Gas Corporation (Richmond, Va.) recently approved a substantial construction program for the corporation during 1958 which will cost about $1,650,000. William H. Trapnell, president, said that considerable expansion of facilities has been made necessary by the steadily rising demand for natural gas throughout the Richmond-Tidewater area. During the past year, he stated, construction was completed of 40 miles of 18-inch "loop," 13 miles of 12-inch "loop" and 14 miles of smaller lateral lines. After completion of the 1958 additions the corporation will have approximately 300 miles of main and lateral gas transmission lines.

Con. Ed. Purchases Fleet Of Reading Truck Bodies

A FLEET of 12 Reading truck bodies, "job-planned" for line construction work and maintenance service, have been purchased by the Consolidated Edison Company of New York, Inc., for assignment throughout Westchester county.

The bodies were manufactured by the Reading Body Works, Inc., of Reading, Pa., and specially adapted for Con Edison by the Franklin Body and Equipment Corp. of Brooklyn, New York.

The 12 units include 10 one-ton, light-duty construction bodies, a three-quarter ton maintenance body and a three-quarter ton panel body.

New 36-page Treatise Simplifies Selection of Protective Coatings

JUST off the press is the new industry-wide Rust-Oleum Corporation thirty-six page protective coatings manual released by the Rust-Oleum Corporation, 2799 Oakton street, Evanston, Illinois.

The comprehensive treatise features actual color chips of 102 different coating items and includes complete sections devoted to methods of surface preparation, use of primers, and finish coatings, and the availability of special custom coatings where required.

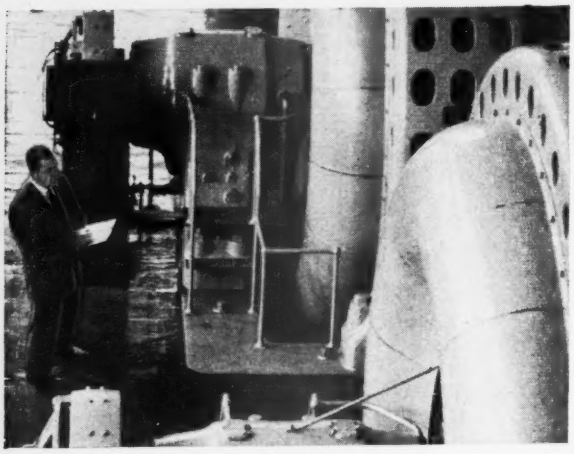
Sections of the new Rust-Oleum manual include Primers, Short Type Coatings, Long Oil Type Coatings, Restful Color Group, Oil Finishes, Heat Resistant and Chemical Resistant Coatings, Galvinole Coatings, Floor Coatings, and other specialized maintenance products.

The new catalog (Form No. 2[illegible] may be obtained by writing the Rust-Oleum Corporation, 2799 Oakton street, Evanston, Illinois.

Gai-Tronics Offers New Advan[illegible] In Inter-Communications

A. R. ROYLE, general manager Gai-Tronics Corporation, Reading, Pa., has announced his company's new GTC (Gai-Tronics Transistorized Communications), a major advance in operational intercommunication for Power and Industry. An industrial dual channel, voice communication system for use in very noisy areas requires no central amplifier or control equipment whatsoever. Telephone type Handset Stations and Loudspeaker Assemblies connected by just two pairs of #18 unshielded wire plus a 115 volt A. C. power source co[illegible]

(*Continued on page 28*)



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They consist of 10 questions and 10 authoritative answers based on current decisions revealing court and commission views pro and con. Annual subscription $10.

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Washington 4, D. C.

New advantages for truck owners introduced in all-new Dodge Power Giants for '58

wer, payload, economy and styling features ke Dodge 4-way leaders of low-priced 3

cent introduction of the new '58 Dodge *Power nts* brings truck owners a series of the most out-nding advances in Dodge truck's 40-year history.

power, for instance, Dodge offers three new *wer Giant* V-8's that provide up to 234 hp. . . . as ch as 24% more than other low-priced makes. ese extra-powered engines can take it easy under rmal loads . . . keep going longer, too.

yload capacities are up to an all-time high. assis construction features the elimination of ess weight while actually increasing strength. u get as much as ⅓ more payload capacity.

When it comes to economy, Dodge sweeps the field because of its exclusive Power-Dome V-8 engine design that reduces harmful carbon deposits. This improves gas mileage . . . practically eliminates the need for major engine overhauls.

Dodge styling gives truck owners a real prestige bonus. Striking dual headlights, massive new grilles and luxury cabs are exceptional highlights.

All in all, truck owners would be well advised to check into the '58 *Power Giant* line-up before replacing or adding units. These Dodge trucks are definitely four-way leaders of the low-priced three.

DODGE *PowerGiants*

prise the new system. This results in greatly simplified installation and maintenance.

The Handset Stations and Speaker Assemblies each has its own "plug-in," printed circuit transistor amplifier.

Indoor units are dust tight; outdoor units are also weatherproof. Handsets employ noise-canceling dynamic transmitters and high efficiency receivers. Spring return pushbutton (optional locking) selects Page or Party-line Telephone channel. Basic system allows two simultaneous conversations, one on each channel, both of which are common talking.

A brochure which completely describes and illustrates GTC is now available and will be sent upon request. Address Gai-Tronics Corporation, Reading, Pa., Dept. GTC.

Porter Elects Vice President

FRED W. ELLIOTT has been elected a vice president of H. K. Porter Company, Inc. Mr. Elliott previously had been assistant to the president, C. L. Holbert.

He joined Porter in 1956, com from the Pennsylvania Indust Corporation; prior to that he had b with the Batelle Memorial Instit Columbus, Ohio. Mr. Elliott is a gr uate engineer from the University Pittsburgh; he received his M.S. f Ohio State.

Southern Cal. Gas Sets $40,263,000 Budget for '5

FOR the third straight year South California Gas Company's cap budget to handle additions and bet ments has exceeded the $40 mil mark, it was announced recently President and General Manager F Banks.

The new budget, which totals $ 263,000, will be expended to meet tremendous continuing expansion industry and population in the c pany's area.

Previous budgets which have top the $40 million mark were appro in 1956 and 1957. The 1957 budge $44 million stands as the highest Company history.

Largest single item in this ye budget, as in most normal years the projected expenditure of $12,8 000 for additional mains, meters services needed to supply the new c tomers expected to be connected the company's lines during 1958.

$75,000,000 Program Planne By Detroit Edison for 1958

THE Detroit Edison Company continue the long-range expans program launched by the company mediately following World War I with 1958 construction expenditu estimated at $75,000,000.

The amount budgeted for constr tion this year will provide for s structure work on Edison's generat station at the Enrico Fermi Ato power plant, the completion of River Rouge power plant and the c tinuation of work on the two-unit dition to the St. Clair power pl Other projects for 1958 will incl the construction of 14 new distribut substations, the building of new tra mission and distribution lines and expansion of some eight existing tribution stations.

Electrical use in Edison's 7,6 square-mile service area reached all-time high of 12,559,23[illegible].000 k watt-hours in 1957—more than do ble the amount used in 1947. Sin the company was incorporated in 19

This advertisement is neither an offer to sell nor a solicitation of offers to buy any of these securities. The offering is made only by the Prospectus.

NEW ISSUE

February 11, 1958

1,000,000 Shares

Southern California Edison Company

Cumulative Preferred Stock, 4.78% Series

($25 Par Value)

Price $25.55 per share

Plus accrued dividends from date of issue

Copies of the Prospectus may be obtained from any of the several underwriters, including the undersigned, only in States in which such underwriters are qualified to act as dealers in securities and in which the Prospectus may legally be distributed.

The First Boston Corporation **Dean Witter & Co.**

DUSTRIAL PROGRESS—
ontinued)

as generated 188.7 billion kilowatt-
rs of electrical energy, more than
f of which was produced in the last
years.

At the end of 1957, the company
rved 1,226,842 residential, commer-
l and industrial customers—about
000 more than at the end of 1956.
troit Edison studies indicate that
e number of electric customers will
crease substantially in the future and
at the requirements of individual
sidential customers will continue to
e.

It is estimated that in ten years the
erage residential customer will be
ing 4,800 kilowatthours of electrical
ergy a year as compared to 3,114
owatthours in 1957, 1,992 in 1950
d 1,641 kilowatthours in 1947. By
75 the average customer will use
200 kilowatthours annually, accord-
g to Edison forecasts.

ower Load Reached All-Time High in December '57

EAK electric power load in 1957
r the United States as a whole to-
led about 107 million kilowatts in
ecember, it was announced in a year-
d report by the Electric Power Sur-
y Committee of the Edison Electric
stitute, whose study covers over 98
r cent of the industry.

The December peak figure was 4.6
r cent below a forecast given in the
ctober, 1957, survey. A gradual
owing of industrial activity, and mild
ecember weather in many parts of
e nation were factors in keeping the
ower demands below earlier expecta-
ons, the report stated.

Although somewhat lower than esti-
ated in the fall, the peak of 107 mil-
on kilowatts represents an all-time
gh, exceeding the 1956 December
ak of more than 102 million kilo-
atts by nearly 5 per cent. It was
ightly above the 1957 summer peak
106.7 million kilowatts.

Gross margin of generating capa-
ility over the December peak demand
as 22.2 per cent, the report said.

Last year, 132 new generating units
taling about 8 million kilowatts were
laced in operation. This was about
3 million kilowatts more than was
dded in 1956.

A record-breaking total of about
6½ million kilowatts of new generat-
g capacity is scheduled to go into
peration in 1958, the report stated.
s of January 1st, the total program
r expanding electricity-producing
acilities included 45 million kilowatts
f new generating equipment on order

(*Continued on page* 30)

3 feet of frost...
trench 5 feet deep...
30 inches per minute

CLEVELAND TRENCHERS, like Sunberg Well Company's Model 110 working here on the installation of 38,000 feet of 4-inch main in tough frost digging in DeSoto, Iowa, have ***for over 25 years*** delivered ***more trench . . . in more places . . . at less cost.***

Clevelands are built by The Pioneers of the Modern Trencher, originators of ***every*** important trencher design feature. There's a Cleveland for every trenching job and you'll find them working everywhere, giving good ***reliable*** production on tough jobs as well as easy ones—and doing it for year after year.

THE CLEVELAND TRENCHER CO.
20100 ST. CLAIR AVENUE • CLEVELAND 17, OHIO
Good Everywhere

and scheduled for service during 1958 and the next few years. Approximately 82 per cent of the total capacity included in this program is scheduled by the investor-owned electric companies and 18 per cent by governmental agencies—7 per cent by Federal and 11 per cent by non-Federal agencies.

During 1957, actual power output in kilowatthours for the nation set a new record of more than 625 billion kilowatthours, in an increase of nearly 5 per cent over the 1956 production figure.

Total production by heavy equipment manufacturers of 12½ million kilowatts of steam turbine-generator capacity during 1957 set a new record, the report stated. The combined capacity of thermal and hydraulic generating equipment shipped in 1957 by the manufacturers also established a new high, totaling more than 14 million kilowatts. The report covers generating units of 4,000 kilowatts and larger.

Booklet Describes Use of Magnetrol Liquid Level Controls AT EBWR

"THE Power Plant of Tomorrow" is the title of a ten-page booklet describing, in detail, the use of Magnetrol liquid level and flow controls at the Experimental Boiling Water Reactor, Argonne National Laboratories, Lemont, Illinois.

Main theme points up the fact that while atomic energy as a power source may be in the future, the need for safe and dependable safety controls is here now; that, while the book is devoted to the atomic power plant, the level control applications are such as are encountered in any industry, regardless of the end product involved.

Actual photographs from inside the reactor and a simplified flow diagram explain complete function of each of the 16 Magnetrols installed as safety controls.

Obtain booklet by writing Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Illinois.

Potomac Edison to Spend $12,000,000 on Expansion in 1958

A BUDGET of nearly $12,000,000 has been announced by The Potomac Edison Company for construction expenditures on generating, transmission, distribution and general service facilities during the year 1958. This figure is part of the record $33,000,000 budget covering 1956, 1957 and 1958.

Heading the list of major construction items is the expansion of the R. Paul Smith station at Williamsport. Over $5,500,000 will be spent this year to complete the new 75,000 kilowatt unit now under construction at the Smith station. The expansion is expected to be completed in October of this year. The entire cost of the project is estimated at $13,000,000.

The addition of the fourth unit will increase the capability of the Smith station to 168,000 kilowatts, making it by far the largest generating station within the PE System.

The second largest single item in the budget is the construction of a new service center in Cumberland. Plans for the proposed two-building unit were announced in October by Company officials. Construction of the $300,000 center is expected to get underway in early Spring with completion expected in the Winter of 1958.

Four Wheel Drive Issues Book On Multi-Wheel Drive Trucks

A NEW 16-page book on the design features and advantages of multi-wheel drive trucks for both on- and off-highway applications in utilities, oil fields, firefighting, construction, road maintenance, transport, ready-mix, and logging may be obtained by writing to the Four Wheel Drive Auto Company, Clintonville, Wis.

The 9x12 pages of the new FWD book show comparative design of conventional trucks and four and six-wheel-drive vehicles. Through photos and diagrams, the book also details ways in which multi-wheel drive trucks are engineered for on-highway as well as off-highway performance.

The book is called "Plain Facts About the Advantages of Multi-Wheel Drive."

Allen C. Conger Appointed Northwest District Manager, Brown Boveri Corp.

ALLEN C. CONGER, formerly with the U. S. Bureau of Reclamation in Bismarck, N. D., and more recently one of the engineers in the New York office of Brown Boveri Corporation, has been appointed Northwest regional manager in charge of the corporation's new office to be opened March 15th in Portland, Oregon, it was announced recently.

Mr. Conger will be responsible for all operations in Oregon, Washington, Montana, Idaho and Alaska. He will concern himself with engineering and sales of all Brown Boveri power generating distribution, transmission industrial equipment.

Brown Boveri will occupy S 701 in the Executive Building, S.W. Sixth avenue in Portland, gon, where Mr. Conger will make headquarters.

Mr. Conger was in complete cha of operation and maintenance of the Bureau of Reclamation power cilities in the state of North Da for over five years. Prior to this was responsible for the field engin ing, testing, and inspecting the struction of the switchyards for Grand Coulee Dam, Washington.

K. H. MacWatt Appointed Manager of Piping Sales At M. W. Kellogg

THE M. W. Kellogg Company, N York, a subsidiary of Pullman corporated announces the appoi ment of K. H. MacWatt as mana of piping sales in the company's Fa cated Products Division. Prior to new position, Mr. MacWatt was the sales department of the Divisi

Mr. MacWatt joined M. W. K logg in 1952. He has had more t twenty-five years experience in metal fabricating industry, special ing in power piping, heat exchan and process vessel fabrication.

Perry M. Green, Jr., Appointe Kuhlman General Sales Manag

KUHLMAN Electric Company, B mingham, Michigan, recently a nounced the appointment of Perry Green, Jr., as general sales manag of the company's Transformer Di sion.

Mr. Green will head the sales a tivities of Kuhlman's 56 sales offic and three regional factories at B City, Michigan, Crystal Springs, M sissippi, and Salinas, California.

Formerly sales manager of u substations for Bulldog Electric Pro ucts Company, Detroit, Michiga Mr. Green offers an extensive ele trical background. Before joini Bulldog, he served five years as vic president in charge of sales for t Continental Electric Equipment Co pany of Cincinnati, Ohio, and tw years as purchasing agent for t Edenfield Electric Company on t Oak Ridge Atomic Energy Proje Prior to these appointments, M Green was a sales representative fo the General Electric Supply Corpora tion.

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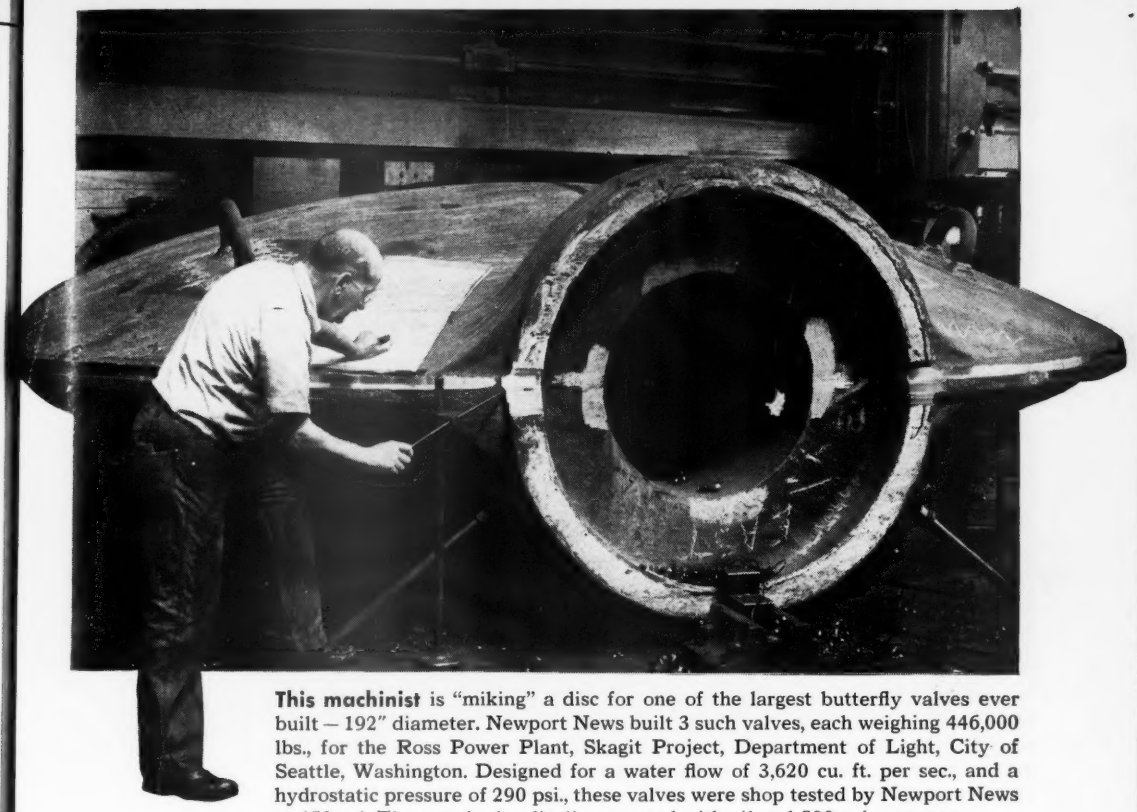

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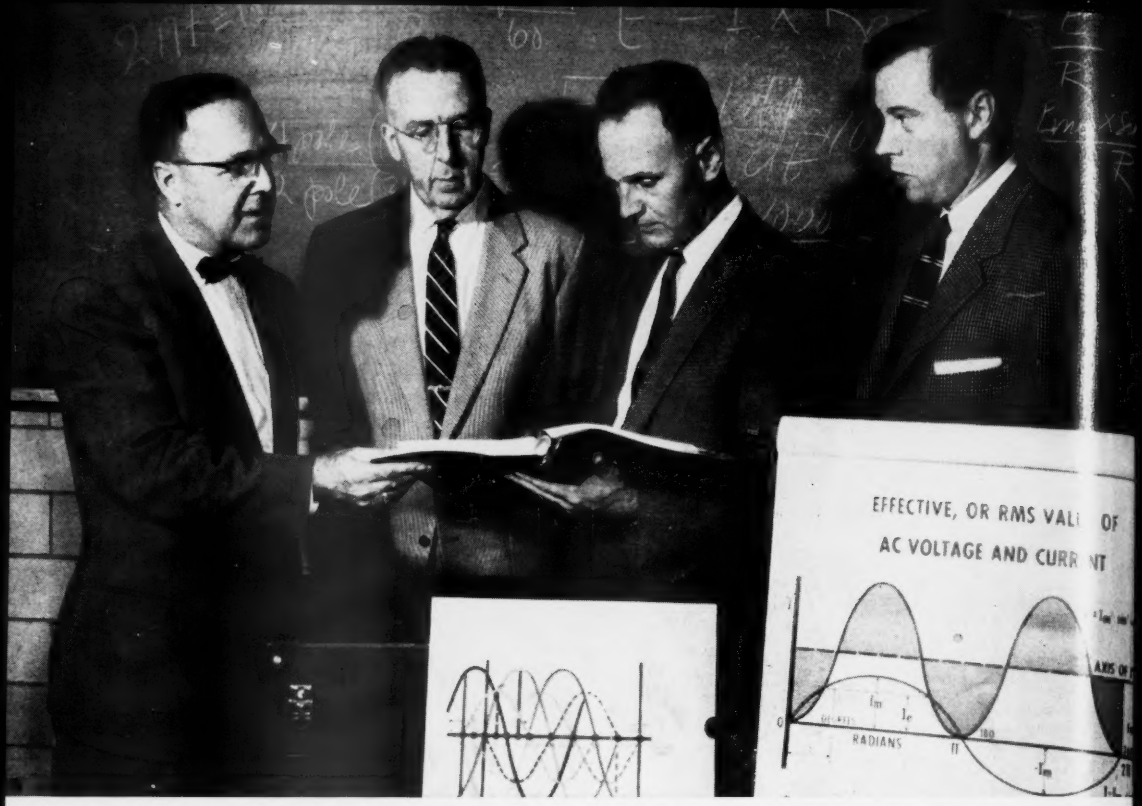

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